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ABSTRACT

The document is the fourth of four substudies concerning female faculty members in different types of educational institutions. The present study focuses on public comprehensive secondary schools and the identification of the perceptions of female vocational faculty members in the three broad areas of dual-role conflict, career aspirations, and career expectations. These are compared with the perceptions of comprehensive high school administrators to identify differences and similarities. Several important discrepancies were found and documented; several important status components of female vocational faculty members were identified. The discussion of the study is in two parts; the first centers on the biographical characteristics of the respondents, the second, on the respondents' perceptions. Among the many findings related to perceptions are these: concerning dual-role conflict, a greater percentage of directors than female faculty agreed that a woman's first responsibility is to be a feminine companion of men and a mother; concerning advancement possibilities, a greater percentage of directors than female faculty agreed that women successfully compete with men at their institution; and concerning professional aspirations, a greater percentage of female faculty than directors believe that a woman's career should be subservient to her husband's. (Author/AJ)

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THE STATUS AND ROLE OF FEMALE VOCATIONAL FACULTY IN COMPREHENSIVE HIGH SCHOOLS

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Pennsylvania Department of Education
Bureau of Vocational Education
(Project No. 14-3064)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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Preface

The findings reported herein are a part of a larger study concerning female vocational faculty members and several types of educational institutions. Included in the overall effort are randomly selected public community-junior colleges, area vocational schools, comprehensive secondary schools, and post-secondary proprietary schools. Each of these became the focal point for separate sub-studies, one of which has its findings reported here.

The series of four sub-studies originated in response to a national concern for the status and roles of professional women in vocational education. A manifestation of this concern was expressed in a resolution proposed by the house of delegates of the American Vocational Association at its Chicago Convention of December, 1972. This resolution read as follows:

> RESOLVED, that the American Vocational Association Board of Directors authorize a study of professional employment in Vocational Education with regard to the number of males and females at every level of the profession, the salaries paid to each category of employee, and identify any restrictions in promotional opportunities because of sex.

This is the fourth of the four sub-studies to be completed and it deals with female vocational faculty members in public comprehensive secondary schools. An important aspect of this inquiry is the identification of the perceptions of these female faculty members in the three broad areas of dual-role conflict, career aspirations, and career expectations. Their self perceptions with regard to selected questions in these three broad areas were compared with those of comprehensive high school administrators in order to identify differences and similarities. Several important discrepancies were found and carefully documented herein. Also included in this effort is the identification of several important status components of female vocational faculty members, which are of particular value for comparative purposes. The final effort will be made when all sub-studies are completed, and the result will be a synthesized report of the four inquiries.

The findings reported herein are of great importance in the continuing efforts in identifying components in vocational education in which female faculty are in greatest need of assistance relative to matters of status, career aspirations, dual-role conflicts, and career expectations.

The sample was carefully selected in a random manner, and it is assumed the findings are not untypical of public comprehensive secondary school women vocational faculty and chief administrators. Therefore, the findings, conclusions, and recommendations reported herein by Eugenio A. Basualdo would be of considerable value for others interested in vocational female faculty in particular and area vocational schools in general.

The study was supported by federal-state funds allocated by the Bureau of Vocational Education of The Pennsylvania Department of Education and by the Department of Vocational Education of The Pennsylvania State University. Special thanks is offered to Eugenio A. Basualdo for his long term efforts in this research.

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Chapter 1

THE STATUS AND ROLE OF FEMALE VOCATIONAL FACULTY IN COMPREHENSIVE HIGH SCHOOLS

Introduction

As America moves toward a more humanistic society, equality takes different forms. "When Thomas Jefferson wrote of equality, he was certainly thinking of political equality" (Conant, 1959:5). By the nineteenth century equality came to mean equality of opportunity, and an equal start in a competitive struggle. It is possible that in the near future equality will also mean equality between the sexes, by virtue of the proposed Equal Rights for Women Amendment. Under this Amendment, biological differences between men and women will not be recognized and women will have equal rights under the law.

Regardless of the ultimate fate of the Equal Rights for Women Amendment, the struggle for equality between the sexes will go on, as will the need for additional research concerning the present status and role of women in our society. Those who wish to maintain a culture based upon two distinct sex roles, one for males and one for females, will strive to redirect the current movement; those eager to eliminate discrimination between the two sexes will press for legislation toward that goal. Many not firmly committed to either pole of the argument will seek further enlightenment. In order for decisions to be made, reliable data is essential.

The future role of women in American society will likely be a vital ingredient in determining the country's economic and international status. This has been the case in other countries. According to Trotsky (1970) the economic growth of Russia from 1917 to 1927 was closely related to the incursion of women in all aspects and levels of the labor force, and Stalin's later attempts to return women to subordinate roles brought about a decline in production. As the population growth of the United States levels off, maximum utilization of the country's collective talent will be vital and any discriminatory treatment of women will be detrimental to the country's growth, especially when that group represents 51.3 percent of the total population (Alden, 1974).

Interest in the equality of women runs high in America and, for that matter, all over the world. There are many professional journal, magazine, and newspaper articles dealing with the subject, especially as it relates to employment, and the popularity of such literature is an indication of the strong interest in women's equality. An example of this popularity is the English translation of The Second Sex by Simone de Beauvior that has undergone fourteen printings since 1953.

For centuries, many leading thinkers, such as Engel, Fourier, Lenin, Mill, and others, helped to bring public attention to the unequal status of women and the need for ending their exploitation. They were, however, overshadowed by Darwin, Freud and Rousseau, who were not advocates of women's equality. Charles Darwin, for example, advocated that women were constitutionally inferior to men in anything "requiring deep thought, reason or imagination, or merely the use of the senses or hands" (Gilman, 1971:52). Sigmund Freud's thoughts on women as individuals were expressed when he said that he:

> considered woman an insufficient or defective creature whose entire psychosexual life was shaped by her having been 'deprived' of a penis, and whose moral and social existence was marked by 'envy,' 'insincerity,' 'secretiveness,' an underdeveloped sense of justice and honor and an incapacity for the 'higher human tasks.' . . . 'nature' has paid less careful attention to the demands of the female functions than to those of masculinity' and to identify a 'repudiation of femininity' in biology itself (Gilman, 1971:53).

Jean Jacques Rousseau believed that women's whole education should be relative to men and should prepare women to:

> . . . please them, to be useful to them, to win their love and esteem, to bring them up when young, to tend them when grown, to advise and console them, and to make life sweet and pleasant to them; these are the duties of women at all times, and what they ought to learn from infancy (Gilman, 1971:55).

On the other hand, Frederick Engels was saying that "women have been kept weak in order that the more powerful 'class' of men may simply and directly exploit them . . . " (Gilman, 1971:53). According to Charles Fourier:

> The abasement of the female sex is an essential characteristic both of civilization and of barbarism, the only difference being that to every vice that barbarism practices in a simple manner civilization gives a complex, ambiguous, two-faced, hypocritical form (Ilyina, 1965:301).

Lenin stated that "the proletariat cannot win full freedom unless it wins full freedom for women" (Ilyina, 1965:302). John Stuart Mill, a great defender of women's case against men wrote: "'everything which is usual appears natural,' so that 'the subjection of women to men being a universal custom, any departure from it quite naturally appears unnatural'" (Gilman, 1971:51).

Women's emancipation appeared to begin in earnest shortly after the turn of the twentieth century. This led to the passage of the 19th Amendment to the Constitution of the United States of America in 1919. After seventy years of struggle, American women finally won the right to vote. In Russia, on the other hand, women suffrage was not a gradual development; it began abruptly with the overthrow of the Russian Czar. At the end of the 1917 revolution, the Russian Government proclaimed the right to equal work for both men and women. By 1930 women were found to be employed in all branches of the Russian economy and by 1964 half of the manual and non-manual workers in Russia were women. The participation of females, age 25 to 59, in the Soviet Union's labor force surpassed that of the United States by 25 percent in 1960 (Bowen and Finegan, 1969; Ilyina, 1965; Kern, 1971).

It is important to recognize that the Russians accomplished their changes in women's suffrage by means of revolution, whereas improvement in women's suffrage in the United States was achieved by legislation, a much slower process. This difference accounts in part for the fact that the participation of women in various occupations in the socialistic societies tends to be greater than in the United States. However, participation in the work force does not guarantee equal rights, as it was stated by Khrushchev in 1961, ". . . It turns out that it is the men who do the administering and the women who do the work" (Dodge, 1966: 168).

While it is obvious that the political structure of a nation has a strong influence on the position of women within the labor force, there are other factors that affect their involvement in a country's production. Although women's emancipation appears to have had its beginning in the late 1910's, it was not until World War II that Western Hemisphere women began to enter the labor force in considerable numbers. Even then, the reasoning was apparently more pragmatic than idealistic. According to Caplow (1954), during the war years there was a serious shortage of male workers in the 30 to 45 age range, and the only alternative was to recruit women for traditionally male dominated positions. This finding parallels an observation made by Wrenn (1962), who states that women are allowed in the labor force only because they are needed. Moreover, since World War II the greatest increase in women's participation in the labor market has been stimulated by technological advancements that have succeeded in reducing physical strength requirements to the point that physical considerations are unimportant, and by a trend for men to seek the jobs requiring greater technical skills and therefore providing higher wages. Women have therefore been sought to fill the lower-paying jobs vacated by the men.

In 1970, women accounted for 36.7 percent (or 31.6 million) of the total United States labor force. Forty-four percent of all women over 16 years of age were in the 1970 labor force (four out of five of whom were full-time workers), up from 27 percent in 1940. This reflects an eight-fold increase in the number of working mothers since 1940. In response to a query to identify women's main reason for entering the labor force, more than half indicated it was "sheer economic necessity" (Levitan, Mangun and Marshall, 1972:44). This is a strong indication that national economy is an important influence in the involvement of women in wage earning.

Although the occupational force in American society is no longer the exclusive realm of the male, the continued reluctance of men in accepting women in many of the vocations has forced a large number of talented and well educated women to enter jobs substantially below their capabilities, and at wages less than men in comparable positions (Levitt, 1971; Farmer, 1971). This has resulted in a progressive widening of the differences between men's and women's earnings. In 1955 the salary of the average working woman was 64 percent of that of a similarly employed man; in 1960, she earned 61 percent, which decreased to 60 percent in 1965 and then to 59 percent in 1970 (Ehrlich, 1972). These figures emphasize the fact that the increasing numbers of women becoming employed are located in poorly paid positions.

Nine out of ten women enter employment during their lives and they work for an average of 25 years. Seventy percent of the female high school graduates who do not go on to college are working in clerical occupations. Apparently, women perceive clerical occupations as their most likely work prospects, and the educational system reinforces this attitude. This is reflected in secondary education where 40 percent of all the female students are engaged in vocational programs with the majority pursuing courses in business or commercial education (Evans, 1971). It is interesting to note that only 25 percent of secondary school males are enrolled in vocational programs, an indication that more boys than girls aspire to careers requiring post-secondary preparation.

Women's entry into positions requiring little or no special preparation is reflected by the fact that three out of four women in the labor force are found in five occupational categories: 1) clerical workers (25 percent); 2) factory operators (20 percent); 3) saleswomen (10 percent); 4) domestic servants (10 percent); and 5) other service occupations (10 percent). In contrast, only 9 percent of college and university professors, 6 percent of the nation's doctors, 2.8 percent of the lawyers, 1.5 percent of the police, and 1.6 percent of those in engineering occupations are women (Brine, 1972; Evans, 1971; Caplow, 1954; Alden, 1973). Furthermore, it has been found that women with some college education earn 40 percent less than their male counterpart, and women with four years or more of college education earn 37 percent less than their male counterpart (Ehrlich, 1972).

The same body of research which noted the inequities in earnings for educated women, summarized the situation of those less educated female workers as well, showing that: 1) a greater number of women are working full-time; 2) the likelihood of a woman obtaining employment is greater for those with more formal education; 3) the percentage of all women working has increased by 75 percent from 1947 to 1968; 4) fifty-eight percent of the working women are married; 5) most working women are Caucausian but a greater proportion of non-white women work at almost all ages; 6) forty percent of the working women are mothers, half of whom have children under six years of age; and 7) women with an elementary school education earn 45 percent less than their male counterpart (U.S. Department of Labor, 1969; Diamond, 1971; Ehrlich, 1972; Smuts, 1971).

Yet, despite the strong body of evidence that women workers have not yet achieved equality with men, a compilation by Ehrlich (1972) of surveys in attitudes toward women in our society reveals that: 1) more women are against than in favor of strengthening and changing their status in society (43 to 42 percent), although a considerable portion of them (15 percent) are not sure; 2) the same percentage of men and women (45 percent) approve the women's liberation movement, but more females disapprove of women's liberation than males (43 percent to 42 percent respectively); 3) a majority of the women (65 percent) believe they are treated as fairly as men; 4) almost half (46 percent) of the women believe they have an easier life than men, although nearly a fourth of them expressed no opinion; 5) about 24 percent of the men and women felt that women are discriminated against, resulting in their being treated as second class citizens; 6) nearly half of the women and 38 percent of the men agreed that men should stop appraising women on the basis of beauty and sex appeal alone; 7) three-fourths of the women and men agreed that attractive women should not get better paying jobs than other women; 8) surveys conducted in 1937, 1949, 1955, 1967, and 1971 indicated that the number of Americans who indicated they would not vote for a woman president, even if she were qualified for the job, progressively declined from 66 percent in 1937 to 29 percent in 1971.

Although the attitudes of American society toward the role of women in our economy have changed positively, the actual stature of women within the society has not improved and in many cases has declined. However, with the increase in the amount of education received by women, it is likely that they are becoming more aware of their position under the law. Therefore, it is reasonable to expect that in the future they will be less apt to act in a passive role or allow themselves to be exploited. Some of them will probably demonstrate for their rights, if they are not granted them. This final point is emphasized in Bernice Sandler's (1972) report which indicated that in the last two years, 360 women have filed discriminatory charges against universities and colleges and none of the charges have been disputed by the Department of Health, Education, and Welfare.

In view of the current interest in the status and role played by working women, especially as it is manifested in the proposed Equal Rights for Women Amendment, further research in these areas seem appropriate. The importance to education, particularly vocational education, is an influential factor which indicates that this should be an especially significant source for further study.

Statement of the Problem

The study described herein was designed to: 1) Determine some biographical characteristics of the female vocational faculty members and the vocational education directors in comprehensive high schools. 2) Ascertain the perceptions of the female vocational faculty members and that of the vocational education directors regarding the dual-role, advancement possibilities, and professional aspirations of the female vocational faculty members in comprehensive high schools. 3) Compare the perceptions of the female vocational faculty members as seen by themselves and by the vocational education directors in comprehensive high schools.

In completing this three part study, several questions and null hypotheses were posed. Specifically, in answering Part I, the following questions were examined:

> Question #1. What are some of the biographical characteristics of the female vocational faculty members and the vocational education directors in comprehensive high schools as measured by: 1) their age, 2) their marital status, 3) the number of children they have, 4) the type of work appointment they hold, 5) the number of years they have worked at their present institution, 6) the number of promotions they have received at their present institution, 7) their annual salary, 8) the highest degree they have earned, 9) the type of certificate they hold, 10) the year they earned

their highest degree, 11) their continuing education efforts, 12) their typical weekly work load, and 13) their work experience?

To complete Part II of the study the following questions were investigated:

Question #2. How do the female vocational faculty members and the vocational education directors in comprehensive high schools perceive the female vocational faculty members in their schools, in terms of: 1) the dual-role conflict, 2) the advancement possibilities, and 3) the professional aspirations?

Question #3. What are the relationships between the age of female vocational teachers, their number of years at their present institution, their salary, and the year they received their highest degree and their perception of their dual-role, their advancement possibilities, and their professional aspirations?

Question #4. What are the relationships between the age of vocational education directors, their number of years at their present institution, their salary, and the year they received their highest degree and their perception of the dual-role, advancement possibilities, and professional aspirations of female vocational faculty members?

Question #5. What is the relationship between the item "marriage is an asset for professional women," and the remaining items in the dual-role conflict subscale (see Appendix A) for the female vocational faculty members and the vocational education directors in comprehensive high schools?

Question #6. What is the relationship between the item "women successfully compete with men at this institution," and the remaining items in the advancement possibilities subscale (see Appendix A) for both the female vocational faculty members and the vocational education directors in comprehensive high schools?

Question #7. What is the relationship between the item "women have as much need to achieve as men," and the remaining items in the professional aspirations subscale (see Appendix A) for both the female vocational faculty members and the vocational education directors in comprehensive high schools?

In completing Part III of the study, the following null hypotheses were investigated:

Null Hypothesis #1. No significant differences exist between the female vocational faculty members and the vocational education directors in comprehensive high schools in their perception of the dual-role of the female vocational faculty members as measured by the dual-role conflict subscale.

Null Hypothesis #2. No significant differences exist between the female vocational faculty members and the vocational education directors in comprehensive high schools in their perception of the advancement possibilities of the female vocational faculty members as measured by the advancement possibilities subscale.

Null Hypothesis #3. No significant differences exist between the female vocational faculty members and the vocational education directors in comprehensive high schools in their perception of the professional aspirations of the female vocational faculty members as measured by the professional aspirations subscale.

Origin, Need, Importance and Limitations of the Study

The origin of this study can be traced back to the American Vocational Association (AVA) Convention of 1972 in Chicago. It was there that the House of Delegates charged the AVA Board of Directors with the responsibility of conducting a study to determine the status and role of professional women in vocational education. This study was one of four, each of which was designed to examine the role and status of female vocational faculty members in selected types of institutions. The other three studies were concerned with female vocational faculty members in area vocational schools, public community-junior colleges, and post-secondary proprietary schools. Findings from these studies were reported elsewhere.

The need for this study was based on a number of concerns currently voiced by education leaders and policy makers as found in the literature, in addition to the previously mentioned AVA Resolution. General interest in equality of women and men and a growing concern pertaining to the rights of women in the labor force has stimulated considerable literature on women in recent years. Although the literature is substantial, very little actual research on the role and status of women at work has been completed to date. This is particularly true regarding female faculty in comprehensive high schools, and in vocational education as a whole. It is believed that the findings of this study will have implications for leaders of vocational education and for vocational educators, especially those employed in comprehensive high schools.

This study should shed some light on the question of the changing status and roles of female vocational educators and specifically those found in comprehensive high schools. The findings may help to correct many of the misconceptions held by some administrators and vocational teachers about the status and role of female vocational faculty which could result in a reduction of the number of court litigations regarding the discriminatory treatment of women (Ingram, 1973).

Definition of Terms

In order to clarify some of the terms used in this study the following definitions are included here.

1. Profile of Characteristics:

   The profile of characteristics is a set of traits of a group of individuals, or of an individual that distinguishes him from others.

2. Roles:

   Roles are the dynamic aspects of positions and statuses. They are expectations (the rights, privileges, and obligations) to which any incumbent of the role must adhere. Roles are complementary; they have meaning and definition only in relation to other roles. When expectations are violated, someone is likely to impose sanctions that can be either rewards or penalties (Corwin, 1965).

3. Role Consensus:

   Role consensus is the way in which the role is perceived by the actor or person carrying out the role. Further, it is the commitment by which the actor of the role adheres.

4. Role Expectation:

   Role expectation is the way the role of an individual is perceived by others.

5. Role Conflict:

   Role conflict exists when there are significant differences between role consensus and role expectation.

6. Perceived Individual Advancement:

   Perceived individual advancement is the advancement possibilities as viewed by the person seeking the advancement.

7. Expected Individual Advancement:

   Expected individual advancement is the advancement possibilities of an individual as perceived by others.

8. Conflict in Advancement Possibilities:

   Conflict in advancement possibilities exists when there are significant differences between advancement consensus and advancement expectations.

9. Perceived Individual Aspirations:

   Perceived individual aspirations are the aspirations which an individual has according to his own view.

10. Expected Individual Aspirations:

    Expected individual aspirations are the aspirations of an individual as perceived by others.

11. Aspiration Conflict:

    Aspiration conflict exists when there are significant differences between the perceived individual aspirations and the expected individual aspirations.

12. Comprehensive High School:

    A comprehensive high school is a secondary school with several departments (e.g., English, science, vocational) offering a diversified program to meet pupil needs.

13. Female Vocational Faculty Member:

A female vocational faculty member is a female that teachers in a vocational education program in a comprehensive high school.

14. Vocational Education Director:

A vocational education director is the person in charge of administering the vocational education program in a comprehensive high school. For the purpose of this study, the term vocational education director will be used synonymously with the term administrator.

15. Promotion:

The term promotion in this study is used to refer to the advancement from: a) full-time teaching to full-time administration, b) full-time teaching to teaching/administration, or 3) teaching/administration to full-time administration.

Chapter 2

REVIEW OF RELATED LITERATURE

The primary purpose of reviewing the literature was to uncover writings and research related to the status and role of female vocational faculty in comprehensive high schools. To achieve this goal, the review of related literature was broken down into five areas: 1) status, 2) role conflict, 3) advancement possibilities, 4) aspirations, and 5) women in public education.

Status

Status can be defined as a relative position in a hierarchy of prestige, or as rank in relation to others. According to Hoppock (1935), the relative status of an individual within certain socioeconomic groups is determined by the combination of the individual's rank within an occupation and the rank of the occupation in his community. The status of an individual is directly related to the rank of the person's occupation. This in turn depends on the hierarchy that the occupation possesses within the American society. Therefore, it is difficult to conceive that we can change the status of an individual without changing the characteristics and roles which occupation connotes in our society (Gillie, 1973).

Mayer (1971) discusses status as the statuses of positions and the relationships of status to the economic rank, prestige, and power of these positions. He said that in modern industrial societies social classes were no longer set apart by tangible, legal boundaries as in feudal societies. The lack of legal restrictions and the increase in economic, technological, and demographic dynamism increased the demographic mobility of individuals, families, and groups. This increase in mobility weakened the inheritance of positions, especially in the middle ranges of the economic potential, prestige, and power of the positions.

In support of the theory that the status of an occupation is directly related to the economic remuneration received from it, Mason and Gross (1955) in their study of superintendency positions reported that there was a high correlation (r = .89) between the prestige ranking of a superintendent position and the salary of the superintendent. Similar correlations were found between the salary of teachers and job prestige. Superintendents, although they did not admit this in response to a direct query, used salary level as the number-one criteria when evaluating the desirability of jobs.

In modern society, status is still inherited to a great extent through social classes, especially at the top and the bottom of the hierarchical range, but the factor of inherited status is slowly beginning to dissolve in the middle. The economic and educational attainment hierarchies have changed their shapes from pyramidal to diamond with the increase in white collar jobs. Visible status differences have become less apparent with the introduction of automation and subsequent reductions in unskilled jobs. Of the three position status components, power is the only one that has remained stable and its hierarchy still maintains a pyramidal shape. This indicated that a large majority of the population participates little in the decision making process.

When discussing status, Zalenznik (1956) pointed out that although the status of an individual at work and his status in his community are different, they are both determined by the status of his occupation. When an individual moves into a community, his occupation dictates his status; but if the community has many other people with similar occupations, then income will determine his status. Herr and Cramer (1972) stated that the status level of an individual was determined by the prestige of his occupation which was based on such factors as: money earned, power, type of work involved, responsibility for social welfare, amount of education, and other prerequisite factors. Based upon his findings, Jenks (1972) partially concurred with Herr and Cramer when he stated that most people tend to rank occupations high if they attract highly educated workers, if they pay well, and if the percentages of blacks and women working in the occupation are small. According to Kornhouser (1953), to date the best single indicator of an individual's social status in the American Culture is his occupation.

In most cases, the status of a woman in our society is determined by the status of her husband, and his occupational status will in turn determine the family status. Karman (1973:14) noted that:

> . . . sex status appears to be a salient factor in a woman's professional career, and too often she is expected (by herself as well as others) to subordinate her individualistic goals to those of her husband and family.

It was Ginzberg (1966) who alleged that women were less dependent than men on their careers and economic gains for status, but on the other hand, females could not realistically plan on a career until they knew what kind of man they would marry, assuming that they planned to marry. Roe (1956) contended that it was considered respectable for a woman to work because of economic necessity but it was not if she worked because she wanted to or because she was seeking higher status. Roe also pointed out that in the latter two cases, women were subject to some social or other penalties.

In an effort to appraise women's status in education several studies were reviewed. Some of these studies are described in the following paragraphs.

In reporting the findings on the status of women at the University of Chicago, Freeman (1970) stated that this university was not free from male chauvinism and sex discrimination in its employment practices. Few women were hired and few stayed more than one appointment (3 years) and those that stayed remained with untenured status for an abnormally long time. Furthermore, females were more likely to be hired as instructors or lecturers rather than assistant professors. Those who became full professors did so by promotions within departments dominated by female faculty.

Minturn (1971) has found that women at Colorado University at Boulder, are discriminated against in terms of salary and rank. The discrepancies in salaries between male and female faculty of comparable rank increase with rank. Women seem to be "frozen" at the associate professor level (10 percent of the associate professors are women and only 5 percent are full professors).

In reporting the status of women at the State University System of Florida, Mackay (1971) stated that females represented: 1) almost 2 percent of the professors, 2) about 12 percent of the associate professors, 3) nearly 20 percent of the assistant professors, 4) almost 30 percent of the instructors, and 5) 30 percent of the lecturers.

She further stated that a list of recently hired faculty indicated that: 1) no females and 15 males were hired as full professors, 2) 2 females and 13 males were hired as associate professors, 3) 5 females and 69 males were hired as assistant professors, 4) 8 females and 8 males were hired as instructors, and 5) 2 females and 5 males were hired as lecturers.

Van Fleet (1972) in his survey of AAUP members (American Association of University Professors) found that there was a 25.5 percent difference between mean faculty salaries of males and females at the University of Akron. Females with doctoral degrees had almost the same professional rank and salary characteristics as male faculty that only had master's degrees.

According to Miner (1972), women at Stanford University accounted for only: 1) two percent of the professors, 2) seven percent of the associate professors, 3) eight percent of the assistant professors, and 4) five percent of the total faculty. Miner further stressed that the schools of Earth Science, Engineering, and Business had no women academic council members.

A study of the faculty conducted at Ohio Wesleyan University revealed that the mean salary for all female faculty was only $9,911 while their male counterparts averaged $12,094. Inequality extended to tenure as well. Only 42 percent of the female faculty were tenured as compared to 55 percent of the male faculty. Committee chairmanships were also found to be dominated by male faculty. Only two committees during the period 1966 to 1970 were chaired by women and the percentage of women in those committees ranged from 17 to 30 percent (Calabrase, 1972).

Other studies have revealed similar discoveries, including those conducted at Bowling Green State University in Ohio (1972); Wisconsin University in Madison, Wisconsin (1971); University of Pennsylvania in Philadelphia, Pennsylvania (1971); Illinois State University in Normal, Illinois (1971); the Kansas State Teachers College in Emporia, Kansas (1970); and Wayne State University in Detroit, Michigan (1972).

The American Historical Association's (1972) "Final Report on the Commission on the Status of Women in the Historical Profession" concluded that: 1) 82 percent of the recent female graduates in the historical profession were employed by two-year colleges, 2) 42 percent of the total female graduates in the historical profession were employed by four-year coed colleges, 3) 52 percent of the total female graduates were employed by four-year men's colleges, 4) 59 percent of the total female graduates were employed by private universities, and 5) 40 percent of the total female graduates were employed by state universities. These data help to confirm past indications that female faculty were more successful in finding positions in the less prestigious institutions of higher education.

Robinson (1971) reviewed four major studies of academic women ("Academic Women" by Jesse Bernard, "The Woman Doctorate in America" by Helen Astin, "Women and the Doctorate" by Susan Mitchell, and "Women as College Teachers" by Jean Henderson). From his report, the following facts were derived: 1) one out of 10 doctoral degrees were awarded to females; 2) the average time taken by women to complete their doctoral degree after receiving a B.A. degree was 12 years; 3) female doctoral candidates were older than their male colleagues; 4) the most likely fields for women to complete their doctoral degree were in natural sciences, social sciences, arts and humanities, or education; 5) women that received doctoral degrees usually came from families (e.g., parents) with higher socio-economic backgrounds than their male counterparts; 6) females with doctoral degrees were more likely to be single; 7) if married, they married late in life to males in their field of specialization or related fields; 8) also if married, females with doctoral degrees had two children, lived in a metropolitan area and were working full-time; 9) four out of five women with doctoral degrees were working in educational settings and had published an average of three or four articles; 10) two out of five had received their degree from the institution of their first choice; 11) nine out of ten females with doctoral degrees were working and just about all of them were employed full-time; 12) four out of five women with doctoral degrees were working in higher education; 13) females with doctoral degrees who worked in colleges received higher salaries than those working in universities, but those working in universities expressed greater job satisfaction; 14) at the time of graduation from doctoral programs, the number of jobs offered to women were only one-third of those offered to their male counterpart.

"A Case for Equity: Women in English Departments" edited by McAllester (1972) found that in spite of the opening of university faculty employment and enrollment to women, and in spite of other social changes, women must still endure a status secondary to that of men. Similar conclusions were reached by Sandler (1972) when she wrote that: 1) discrimination exists in all facets of higher education, 2) women are not hired as professors because of their likelihood of pregnancy which would tend to keep them away from their profession, 3) women are less likely to be admitted to colleges and universities because of the belief that women do not belong in professions and therefore their education would be wasted, and 4) women are discriminated against in many textbooks where only men are shown changing the course of history.

Ekstrom (1973) analyzed the different types of barriers encountered by female faculty in their employment situations and placed them in three categories: 1) institutional, 2) situational, and 3) dispositional. In the first category, institutional barriers, she discussed impediments in admission practices, financial aid, institutional regulations, curriculum and services adopted, and faculty and staff attitudes. In situational barriers, she dealt with faculty responsibilities, financial needs, and social pressures. The third category, dispositional barriers, included fear of failure, attitude toward intellectual activities, role performance, ambivalence about educational goals, level of aspiration, passivity, and dependence and inferiority feelings. In reviewing the literature, she found that the majority of the studies dealt with college and graduate school education, and for the most part were restricted to one institution. Other types of post-secondary schools (such as technical or business schools) were found not to be the focus of any study. This promoted her to call for one or more studies of national scope dealing with the barriers encountered by women in continuing their education. She felt that such studies would provide norms by which to evaluate future progress and to assess the effect of several new pieces of legislation aimed at removing these barriers.

In summary, status is a relative position in a hierarchy of prestige. The status of an individual is closely related to the status of his occupation which in turn relates to other occupations in terms of their economic rank, prestige, and power. The status of an individual is still inherited to a great extent through social class, especially at the top and the bottom of the hierarchical range.

When reviewing the status of women in our society, it was found, to a great extent, that the status of a married woman was determined by the status of her husband. Further, the literature on women in education revealed that the majority of the research concerning the status of women had been undertaken by educational institutions and that most of this research consisted of self studies conducted at universities and senior colleges. No study of this kind had been made in comprehensive high schools. Salary and rank were the two main criteria used in determining the status of female faculty. In all cases reviewed, the salaries of the female faculty were found to be lower than those of the male faculty. Women faculty, as a group, also tended to occupy positions with lesser rank than their male counterparts.

Role Conflict

Role conflict was defined as the significant difference between role consensus and role expectation. Each social position, according to Corwin (1965), is composed of several sets of roles and since roles involve consensus and expectations, the potential for conflict between role consensus and expectations always exists. Merton (1951) suggested that each position had a unique set of roles for every relationship in which it was involved. For example, the role relationship of a teacher is different when dealing with a student than when dealing with a parent, an administrator, or another of his or her peers. Because of the many contrasting roles the teacher must assume, role conflicts are almost inevitable. When role consensus and role expectation are assumed to be in agreement, the person who deviates from his role is considered unethical, insubordinate, or disloyal, and he is usually sanctioned. On the other hand, when there is no agreement between role consensus and role expectation, the person who deviates from his role can be seen as responding to an incongruent expectation in an effort to resolve the problem. In this latter case, no matter which course is followed (the one set out by role consensus or the one set out by role expectation) there will be deviation and conformity (Corwin, 1965).

External and internal pressures or controls affect and many times determine role consensus and role expectation. It was found by Maccoby (1960) that administrators working in non-autonomous junior colleges were less likely to approve of teachers involved with controversial issues than administrators of independent junior colleges. This study suggested that the definitions of the roles of teachers, administrators and other staff members varied from institution to institution and that the sources from which the institution derived its funds were important factors in defining roles. Gross, Mason and McEachern (1953) reported that the size of the organization also affected role definitions. Superintendents from larger school systems assumed greater responsibility for the work of their subordinates than those superintendents from smaller school systems. They found, further, that a person in a conflicting role situation tended to choose from his or her obligations those obligations which were less conflicting. Therefore, there would always be a tendency to first capitalize on those obligations that offered the least role conflict and then proceed, ending with the obligations that presented the most role conflict. Consequently, the potential would always exist that some obligations would go unmet.

It was Maccoby (1960) who alleged that role conflict could not be avoided because after an individual selected a position he conformed to the least conflicting roles of those he perceived to be within that position. Thus, as role consensus increased the obligations inherited by the role would also increase, augmenting his total productivity. Parsons (1971) discussed role consensus in terms of two components: 1) commitments and 2) capacities. He stated that every individual, in carrying out a role, first needs the commitment to implement the role within the structure of society, and second, the capacity (or skills) to perform the role and to meet the expectations of others in terms of the behaviors appropriate to the role.

Getzels (1971) stated that roles are complementary to other related roles. Thus, the teacher/pupil role (or vice-versa) cannot be understood or implemented except in relation to each other. Roles are imperative functions of all social systems, they are the networks of interpersonal relationships that are to be carried out. Roles are the dynamic aspects of positions and statuses. They define rights, privileges and obligations to which any incumbent of the role must adhere. The agencies established to carry out the roles are the institutions. Social systems, on the one hand, are composed of institutions with certain roles that carry some expectations that will fulfill the goals of the system, and, on the other hand, of individuals who inhabit the system and who have certain personalities that determine need-dispositions. The interactions of institutions with individuals, roles with personalities, and expectations with need-dispositions determine the social behavior. Figure 2.1 is a sketch of the framework that Getzels *used to identify five types and sources of conflict.*

Although Getzels stressed that these are not the only types and sources of conflict, he limited his discussion to the following five:

1. Conflict Between Cultural Values and Institutional Expectations. A good example is the teachers in our school systems who are expected and supposed to be good citizens and models to society in general, but in reality are barred from many roles which are marks of good citizenship. For instance, outspoken participation in local political parties is prohibited in some school systems, and even though there are no written laws prohibiting local political participation, it many times becomes the grounds for dismissals (Brookover, 1955).

For another example of this type of conflict, a look at Coleman's (1959) findings seems appropriate. Of the 3,830 secondary school students surveyed by Coleman, 94.7 percent indicated that if they were appointed assistant in the biology laboratory because of their good grades, it would not increase their popularity nor would it make their friends envious of them.

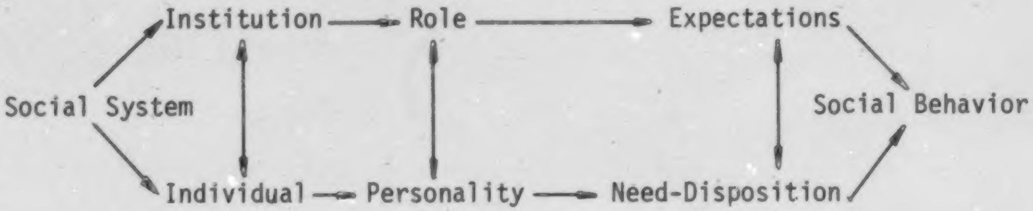


Figure 2.1 Types and Sources of Conflict

2. Conflict Between Role Expectation and Personality Disposition. A good example of this type of conflict is found when authoritarian teachers are working in permissive schools or when permissive teachers are working in authoritarian schools. Authoritarian teachers tend to be bothered by noise, distraction on the part of the student, interruptions, and other factors which are tolerated in permissive schools; and permissive teachers find themselves in conflict in complying with the rules and regulations of authoritarian schools.

In his doctoral dissertation, Lipham (1960) hypothesized that the role of school administrators could be defined and measured in terms of certain crucial expectations. Through personality instruments and interviews, he confirmed his hypothesis that administrators with certain personality characteristics such as striving for higher status, good verbal ability, successful communications with others, emotional control, etc., would tend to have less conflict in fulfilling the expectations of their jobs.

3. Conflicts Between Roles and Within Roles. Conflict between roles can occur when success on the job interfers with being successful at home with the family. For example, a successful physician tends to have many emergency calls at home, causing disruption in the role as a parent.

Conflict within roles can be experienced when individuals are required to conform to contradictory or inconsistent expectations. For example, a university faculty member may be expected by his department chairman to emphasize teaching and service to the students while the academic dean expects an emphasis on research and publications.

4. Conflicts Deriving from Personality Disorders. This type of conflict can occur when individuals misperceive the role expectations placed upon them because of their personalities. Usually these individuals do not perform the roles they are expected to perform for the betterment of their institution but they adjust their roles to suit their personal needs and dispositions.

Examples of these types of conflicts are sometimes found with people working in public relations. The individuals are supposed to be courteous, polite and well mannered, but some, because of their personalities, act with arrogance and impertinence.

5. Conflict in Perception of Role Expectations. It is not uncommon for some people to misunderstand their roles. For instance, it is common to find vocational school graduates expecting to be treated as competent craftsmen the first day they enter an occupation. In these situations, when there are conflicts between role consensus and role expectations, the attitude toward the institutional goals becomes secondary. In a study of goals and ambivalence between the faculty values and a community college philosophy, Bloom, Gillie and Leslie (1969:28) found:

> . . . that the "faculty philosophy" is at serious odds with the "community college philosophy." This is not to say that faculty members strongly oppose the purposes of their institutions; clearly their views are most accurately defined as ambivalent. It is difficult to imagine, however, that two-year colleges can establish and maintain institutional vitality of purpose with only reserved faculty support.

Along similar lines, Moyer (1954) studied the expectation for leadership in educational settings between administrators and teachers.

He found that the greater the agreement between teachers and principals on the expectation of leadership, the more favorable the attitudes would be toward the work situation.

In discussing sociological role theories, Heiss (1969) grouped them into two: 1) the social-psychological, and 2) the structural. He went on to explain that the social-psychological role theorists' major interests were to understand the processes of role learning and the interaction between the participants. On the other hand, the structural role theorists concerned themselves with explaining how the roles played by the individual affected the system's content, organizational structure, and functions. According to Heiss, all these theorists shared the following two basic assumptions: 1) roles are learned by social interaction, and 2) expectations associated with roles and statuses are learned by interacting with others. All these theorists believed that role conflict would occur in all situations where the individual had more than one role to play. A typical example of role conflict would occur when husbands tried to teach their wives to drive.

In examining the process of role learning, social-psychological role theories can be put into two groups: 1) those theories that view role as a dependent variable and whose main concern is the detail of the role-learning process, and 2) those theories that view role as an independent variable and whose main interest is to understand the outcome of the actual dialogue between the participants. In explaining social-psychological role theories, Heiss discussed general socialization, language development, the development of role-taking ability (or the ability to imagine oneself in the place of another), the self concept, the perception of self (or impression that oneself wishes to make upon another), and other topics in detail.

In analyzing the consequences or effects of a role upon a system, structural role theorists considered the latent (or hidden) functions as well as the manifest (or overt) functions of a role. These theorists were also concerned with the analysis of alternative roles that could substitute for the role or perform its job. Most of the structural role theorists subscribe to the following positions: 1) the role system of a group must fulfill essential functions if the group is to survive, 2) roles tend to keep a system integrated, 3) role changes will bring system changes, and 4) as systems develop, role differentiations are acquired (Heiss, 1969).

The idea that roles are illusions or social suggestions was presented by Burgess (1969) when he explained that roles tended to become obsolete due to the changes in life's conditions. For example, some modern husbands tend to perceive their wife's role in the family as that performed by their mothers. On the other hand, their wives perceive their role in the family to be that of a more liberated woman. This difference in perception tends to create role conflict and disharmony within the family. If the fact that no two individuals are equal in fulfilling the same role is added to the dynamism previously explained by Burgess, it is then fair to expect role conflict when an individual is undertaking a new position. The degree of role conflict and disharmony encountered by different individuals tends to be related to the individuals' similarities in values, their interpersonal attraction and satisfaction, and the congruence between the description of the role by the role taker and the description of the role by others (Jacobson, 1969; Coombs, 1966; Levinger and Breedlove, 1966; Luckey, 1969; Kotlar, 1965; Lewis, 1972).

In summary, roles are the dynamic aspects of positions. Each position has a unique set of roles when related to other positions, which are expected to be carried out by the person fulfilling that position. Roles are imperative functions of all social systems. They are the networks of interpersonal relationships. They define rights, privileges and obligations. Roles are affected by external and internal pressures, and therefore the person fulfilling the position would tend to capitalize on those roles that are less conflicting to him and which best accommodate external pressures.

The interactions between institutions and individuals, roles and personalities, and expectations and need-dispositions, which are present in all social systems, determine social behavior and are the source of role conflict. As social systems progress, roles tend to become obsolete due to changes in life's conditions.

Role theories can be grouped into social-psychological role theories and structural role theories. The social-psychological role theories are concerned with the process of role learning, whereas structural role theories are concerned with the effects of the role over the system content, organizational structure, and functions.

Advancement Possibilities

For many American workers advancement possibilities mean the possibility to be promoted to a higher level and better paying job at their present place of employment. Because American workers' desires for promotion differ in nature and intensity, it is hard to determine with exactitude the number of workers dissatisfied with their advancement possibilities and the depth of their dissatisfaction. Dissatisfaction with advancement possibilities has been found to be closely correlated with mental health problems, the perception of on-the-job discrimination, and overall job satisfaction. It has been estimated that only 32 percent of the total labor force are satisfied with their jobs (Mackenna, 1972; Manpower Report of the President, 1974).

A survey of working conditions conducted by the Survey Research Center of the University of Michigan (1969) found that: 1) more than 50 percent of the workers considered promotions very important and less than 20 percent assigned little or no importance to advancement opportunities, and 2) more than 40 percent of the workers stated that they did not expect or desire to be promoted but an equal percentage indicated that they desired to be promoted sooner than they expected to obtain a promotion. This section of the research seems to indicate that when examining advancement possibilities in any institution we should not be content with just making sure all individuals have an opportunity to advance as far as they are capable; but we should also make sure that they can stop advancing, if they so desire, at any point in their career without being penalized. A good promotion system not only should assure workers of vertical mobility (the movement from one occupational stratum to another at a higher or lower level) but it should also allow them to move horizontally, in other words to change functions but to remain at the same level of the strata (Issacson, 1973; Manpower Report of the President, 1974; Evans, 1971).

A second study of the working conditions, conducted by the Survey Research Center of the University of Michigan during the Winter of

1972-73, indicated that more promotions were received by men than by women, and more promotions were received by younger than by older workers. No significant difference was found between the promotions of white and black workers. This last finding however can be construed as the persistent discrimination against black workers in our society. Under full equality of opportunities, black workers should have a higher rate of promotions than white workers because black workers are concentrated in lower level jobs. The findings of this study also showed that 65 percent of the female workers and 47 percent of the male workers felt that they had little or no chance for advancement in their present job. In the total work force, 54 percent of the workers felt that they had little or no chance for advancement in their present jobs. This finding exactly coincides with that of Sheppard's study which indicated that 54 percent of the workers interviewed did not expect to be promoted by their present employer. These workers felt that they had reached a dead end (Manpower Report of the President, 1974; Sheppard, 1971).

The same University of Michigan study indicated that 44 percent of the workers would like to be promoted within a year but that only 24 percent of them expected it to happen. The interest for promotion was found to be correlated with three major demographic characteristics:

1. Age. In analyzing the data dealing with age, it was found that 80 percent of the older workers (55 years of age and over) and 30 percent of the younger workers (under 30 years of age) indicated that they had no interest in being promoted.

2. Sex. The data revealed that about 54 percent of the female workers and 39 percent of the male workers expressed no interest in being promoted.

3. Race. In examining the data related to race, it was concluded that 40 percent of the black workers and 30 percent of the white workers stated that they had no interest in being promoted.

These findings seem to reveal that female, black, and older workers are more likely to consign themselves not to want promotions after realizing their dim possibilities of being promoted. Two-thirds of the workers surveyed also indicated that fairness in handling promotions was an important consideration in selecting an occupation. Finally, women and blacks were found to be significantly less satisfied with their advancement possibilities and their employers' advancement policies than their respective counterparts (Manpower Report of the President, 1974).

A comparative study of the transformation in the role of women in the labor market between 1890 and the late 1950's indicated that, although females in the late 1950's were more evenly distributed throughout the manufacturing industry than in 1890, their positions in these industries had not changed appreciably. Men continued to be assigned to the higher skilled or supervisory occupations while women were still in charge of the menial jobs. Females were still getting jobs that did not require substantial skills and those jobs which had no avenues for advancement possibilities. As it was in the 1890's, jobs that offered advancement training programs were often still restricted to men. Females were more likely than males to be found working in small industries with low capital investment, haphazard conditions, high employee turnover, and low pay. These industries, which took advantage of the cheap labor supply, were usually located in old deteriorated buildings in run down neighborhoods (Smuts, 1971).

Smuts further reported that women's interest in achieving success in a career was found to be as low in the 1950's as it was in the 1890's. It was not important to many working women to earn as much as men or to have the same opportunities for training and promotion. He explained that working women in 1890 were young and looking forward to a married life in which paid work had no part. Today's working women are older and more likely to be married than those surveyed in 1890. Consequently, they tend to be more concerned with their homes and families than with their occupations. This attitude of many working women toward promotion has served as the excuse for many industries to discriminate against those capable and ambitious females who have wanted to develop and utilize their abilities (Smuts, 1971).

To discuss advancement possibilities in public education, Elliott (1968) divided promotions into eight types:

1. Advancement by Transfer. It is well recognized by many teachers that transferring from a small institution to a larger one or from an unknown to a better known and more prestigious institution is a way of promotion. It is important to notice that promotion does not always mean better salaries in the transferring from institution to institution.

2. Advancement by Class Promotion. This type of advancement occurs when a teacher is promoted within a school system to teach a higher class level, for example, when an elementary teacher is promoted to teach secondary school classes.

3. Advancement to Supervision. Many teachers are transferred to supervisory or administration positions as a form of promotion. In the

primary and secondary public schools, most of the supervisory and administrative positions are filled by this type of promotion. It should be noted that this type of advancement declines as the level of public education (primary, secondary and higher education) increases.

4. Advancement by License. This type of promotion is given to individuals who obtain a certificate or license of higher standards which enables them to qualify for higher positions.

5. Advancement by Salary. Promotion of this kind is found in the better organized educational system as a means for obtaining permanency and professional betterment of its teaching staff. The teacher is rewarded with higher salary because of years of experience, education, and other attainments that enhance teaching effectiveness.

6. Advancement by Fortuitous Means. Instances are found in all segments of education where the promotion and appointment of teachers is based upon favoritism, partisanship, or mere chance, instead of professional efficiency. This method of advancement, which exists in different degrees in all school promotion systems, places the incompetent and competent teacher at an equal level for promotion.

7. Advancement by Merit. Regular or extraordinary professional achievements on the part of the teacher are recognized through advancement in position or through other types of compensation. These types of promotions are based on the improvement in teaching ability which can be measured in terms of teaching accomplishment, further educational acquisition, or formal examination of the teacher.

8. Automatic Advancement. This method of advancement is the most commonly used, with salary promotion based primarily upon years of satisfactory service. A combination of merit and automatic advancement

is often used as a means of protection from social and partisan influences for the majority of the teachers, and also to maintain the stability and efficiency of the total teaching staff.

In concluding this section on advancement possibilities, it must be mentioned that according to Thomas (1956) the majority of workers tended to remain at the same level in their occupations in which they had been hired. About three-fourths of those workers first employed in white-collar and manual labor jobs remained in these positions permanently. He further stated that except for farmers, skilled craftsmen, proprietors and managers and officials, the positions workers held when they entered employment tended to become their life careers. In other words, the occupational level and the occupational group that an individual chooses in entering employment will greatly determine his future life and that of his wife and children.

In summary, advancement possibilities are an important factor in determining workers satisfaction with their jobs. Fairness in the handling of promotions is an important consideration for workers when selecting an occupation. Although the right to advance vertically is important to workers, the right to stay in one position or to advance laterally is also of importance to them, since the majority of the workers tend to remain permanently at the same level in their occupations in which they are hired.

Studies of advancement possibilities indicate that men are more likely to be promoted than women, younger workers are more likely to be promoted than older workers, and that there is no significant difference between the promotions of white and black workers. Older, female, and black workers are more likely to express no interest in being promoted than their younger, male, and white counterparts. More women than men feel that they have reached a dead end in their job regarding promotion, and in general, more workers want to be promoted than expect to be promoted. Finally, female and black workers are found to be significantly dissatisfied with their present advancement possibilities.

Aspirations

As defined by Webster's Dictionary (1973) aspirations are strong desires to achieve something high or great. Therefore, occupational aspirations can be defined as strong desires to achieve higher or greater positions.

Nettler (1974) proposed that aspirations were verbalizations of some desires which should be planned, have intention, and direction. The values that energize "aspirations" and give them proper meaning differ between people. Aspirations are both what people want in words and in actual deeds. Therefore, the discussion of aspirations involves interests, motivation, application, and ability.

The discussion of aspirations in terms of their levels was presented by Hilgard (1962) when he introduced the notion that an individual sets his goals in the same way that a high jumper sets the bar he will jump. The bar is set high enough so there will be chances for failure and also chances for success. The experience of success or failure depends, then, on the level of difficulty of the task; therefore "success and failure experiences come in the in-between range: between the point at which success is highly probable, but failure possible, and that at which failure is highly probable, but success possible" (151).

From reviewing some experiments dealing with aspirations, Hilgard concluded that aspirations were modified by group performances, self-protection, prestige-seeking, and other goals that reflected the setting in which the motivated behavior had occurred. Thus the individual's aspirations would be dictated, to an extent, by the aspirations of his peers.

In discussing workers' occupational aspirations, Scheneider (1969) stated that even though life outside of the factory presented many attractions for the workers, the work situation carried a great deal of importance for them. It was through their jobs that many workers tried to express certain attitudes, wishes, and values that were an important part of their lives. The aspirations that workers sought to fulfill within their jobs were directed toward obtaining economic security, maintaining good working conditions, controlling their own affairs, gaining an understanding of interacting forces, enjoying life, and fulfilling certain goals in their community.

Empey (1956) in a study of occupational aspirations of approximately 10 percent of the senior males attending high school in the state of Washington in 1954, found that youths from all social classes aspired to higher levels of occupational attainment than those achieved by their fathers. Empey also indicated that even though they aspired to higher occupational levels than their fathers, youngsters from lower social class families whose fathers held low status occupations had lower relative aspirations than those youngsters from higher social class families whose fathers held high status occupational positions.

Differences in occupational aspirations were also found between students of community colleges and of vocational-technical institutes.

Only 39 percent of the community college students planned to end their formal education after completing the two-year special training program; whereas 60 percent of the vocational-technical institute students indicated that they would be satisfied with this training. Private community college and public community college students, however, displayed somewhat similar educational aspirations (Gillie, 1973).

A random sample of Wisconsin high school seniors was used by Jenks (1972) to do a longitudinal study of occupational aspirations. During their senior year in 1957, these students were tested to determine their occupational aspirations. Seven years later these individuals were located and their actual occupations were compared with those anticipated in 1957. The results showed that these individuals were working in occupations whose average status was only four points lower (on a scale of 0 to 96) than the occupations to which they had aspired.

Jenks further reported that there was a high correlation between occupational aspirations and educational aspirations. The actual distribution of occupational opportunities within the labor market was found to be surprisingly congruent with the distribution of occupational aspirations among high school students. Those students who did not plan on furthering their formal education rarely had high occupational aspirations and vice-versa. Many young people did not aspire to high-status occupations because these occupations required too much formal education. Furthermore, all the schools surveyed by Jenks showed that students with affluent parents aspired to more education than students with poor parents, even when these students had the same test scores and grades.

In justifying the lower aspirations of students [illegible] poor parents, Jenks discussed the following three theories: 1) pressure from home caused higher educational aspirations among middle class students than for lower class students, 2) lower class students had low aspirations because they knew they could not go on to college, and 3) affluent students had higher aspirations and eventual attainments because they attended better schools.

After analyzing Project Talent data, Jenks concluded that: 1) affluent high schools had fewer dropouts and a higher rate of college placement than the average high school because they enrolled students with higher initial aspirations, 2) the family's economic means had a substantial influence on the amount of schooling a student would obtain, and 3) the difference between the aspirations of rich and poor students was partly a matter of academic aptitude and money. Even if an affluent student did not enjoy school, he assumed he would have to stay in school; whereas a student from a lower class family assumed that if he disliked school he could and would drop out.

A study of the levels of creative thinking and their effect upon occupational aspirations was conducted among twelfth grade boys and girls. The results indicated that highly creative girls sought careers in general culture, art, and entertainment rather than careers in service, organization, technology, science, or outdoor types of occupations. Moreover, girls with low creative ability overwhelmingly aspired to work for organizations (Dauw, 1966).

A somewhat similar study was conducted by Astin in 1968. Her findings showed that secondary school girls were often pragmatic in their selection of careers. For example: 1) bright girls tended to select and then continue in career occupations during their high school years; 2) those bright girls that chose a noncareer occupation in their early high school years, tended to switch to career occupations before leaving the high school; 3) less scholastically capable girls tended to select and then continue in noncareer occupations during their high school years; and 4) those less scholastically capable girls that selected career occupations in the early years of high school tended to switch to noncareer occupations during their high school years.

The occupational aspirations of females were also found to be affected by marital status. Single, divorced, widowed, and separated women aspired to gain a sense of independence from their jobs. On the other hand, married women aspired to a job that would ease their life's monotony regardless of its remuneration. "Married women had higher aspirations for work to be interesting, whereas single women either had lost these aspirations through work experience or they never had them" (Wolfe, 1969:18). Wolfe also believed that females aspired to obtain from their jobs: 1) a sense of mastery-achievement, 2) the fulfillment of their social needs, 3) interesting activities, and 4) a sense of independence; the economic rewards of work, however, were rated very low by most of the women. She further stated that females were not seeking to supervise or control their fellow workers, whether male or female, and they frequently sought to avoid this type of responsibility. Many women rejected positions related to leadership, organizing activities, and the feeling of importance.

Supportive findings regarding Wolfe's statement that females were not seeking leadership positions showed that females in all student organizations in colleges and universities accounted for: 1) only 4 percent of the presidents, 2) less than 24 percent of the vice presidents, 3) less than 14 percent of the treasurers, and 4) almost 80 percent of the secretaries (Baine, 1968).

Bem and Bem (1973) discussed the effects of sex-role conditioning on women's aspirations. They felt that it was sex-role conditioning that distorted women's aspirations to the point that 61 percent of the highly gifted females were full-time homemakers and only 3 percent of the females in the ninth-grade, as compared to 25 percent of the males, chose science or engineering careers. Another example of role conditioning was found in Schlossber and Goodman's (1972) study which revealed that although most of the children surveyed felt that either men or women could become doctors or nurses, all the boys chose to become doctors and all the girls chose to become nurses.

The automatic assumptions that women lack or possess certain talents is still prevalent in the minds of women and men. To back this point, Bem and Bem used Philip Goldberg's (1968) study which revealed that the identical article of writing received significantly lower ratings when it was attributed to a female author than when it was attributed to a male author. Through the socialization process, males and females are conditioned to certain options. And through this process, women are robbed of their individuality to the point that if a "newborn child is a girl, we can usually predict with confidence how she is likely to be spending her time 25 years later" (Bem and Bem, 1973:8).

In summary, all individuals have aspirations, but the combination of what individuals profess they want and what they actually do will determine their true aspirations and will differentiate them from others. Individuals tend to set aspirational goals at a level where they can perceive success but also where the possibility of failure exists. Although the aspirations of individuals are partially dictated by their environment and their peers, they also aspire to express through their work attitudes, wishes, and values which are important in their lives.

Studies of aspirations of youths revealed that although youths from all classes aspire to higher levels of occupational attainment than those achieved by their parents, youths from lower class families have lower relative aspirations than those youths from higher social class families. Aspirations are found to be related to opportunities, external pressures, and the family's economic means. Occupational aspirations expressed by high school seniors are found to be highly congruent to their educational aspirations and with their actual occupations later in the labor market.

Studies of female aspirations revealed that the occupational aspirations of women are affected by their marital status and by sex-role conditioning. Girls with high creative ability aspire to careers in art, general culture, and entertainment, whereas, girls with low creative ability aspire to organizational careers. Bright girls in high school tend to choose career-oriented occupations, while less scholastically inclined girls tend to choose noncareer-oriented occupations.

Women in Public Education

Although women have played a great role in our public educational system their role has almost exclusively been in teaching positions.

Lyon and Saario stated that only three state departments of education (Montana, Wisconsin, and Guam) were headed by women in 1972. During the scholastic year 1970-71, women constituted 67 percent of all public school teachers but only 15 percent of the principals and less than one percent of the superintendents. Women working in administrative positions in public education were most likely to be found in elementary schools. They accounted for 19 percent of the total elementary school principals and for 34 percent of the assistant principals. In junior and senior high schools, women represented only 3.5 percent and 3.0 percent of the schools' principals respectively (Lyon and Sarrio, 1973).

According to Corwin (1965) administrative positions in public education for some reason seemed to be unattractive to women. A study conducted by the Women's Bureau of the U.S. Department of Labor, and reported by Corwin, indicated that only 12 percent of the males teaching in public schools wanted to keep their current job, while the remaining wanted promotions to more commanding positions. On the other hand, both single and married women wanted to quit teaching to become housewives. A similar study conducted by Mason, Dressel, and Bain found comparable results. Seventy percent of the women who began teaching in public schools indicated that they expected to leave teaching sometime in the future to become housewives. More than 40 percent of these teachers also stated they never expected to return to teaching and only 16 percent mentioned they planned to stay in the profession until retirement (Mason, Dressel, and Bain, 1959).

Perhaps this lack of commitment to the teaching profession displayed by women reflects a realistic assessment on their part of the limited opportunities for promotions that are available to them in public education. On the other hand, those women who commit themselves to the teaching profession in public education (despite their limited opportunities for advancement) remain within the system in hopes of advancing through the ranks, or to obtain a graduate degree in educational administration in order to return to the system at a higher entry level.

Several studies of women in graduate educational administration programs seemed to reveal that women are also subjected to discriminatory treatment in these programs. According to the University Council for Educational Administration, 98 percent of all faculty members in departments of educational administration were male and only two percent were female during the 1971-72 scholastic year. In 1973, the council estimated that 92 percent of the total student population in educational administration were men and only 8 percent were women (Lyon and Saario, 1973).

The distribution of financial aid to graduate students in educational administration programs also indicated that men are more likely to receive financial assistance from governmental programs than women. For example, during the 1969-70 school year, men participating in the Elementary and Secondary Educational Act research training fellowship programs outnumbered women by a ratio greater than two to one (American Educational Research Association, 1970). Another graduate student financial program aimed at strengthening the educational profession was the National Defense Educational Act fellowship program; during the 1961-62 school year, 88 percent of these fellowships were awarded to men and only 12 percent were awarded to women (Sharp, 1970).

According to Evans (1971) women's participation in public secondary vocational education appeared to be limited to the stereotyped positions in homemaking and clerical occupations. When women's participation in public post-secondary education was reviewed, it was found that most of the females in public community colleges were teaching in the three following areas: 1) health education (57 percent), 2) business education (29 percent), and 3) home economic education (7 percent). When women's involvement in public community colleges was compared to men, it was found that women are out numbered seven to three. Further, when female faculty participation in public community colleges is broken down into vocational and nonvocational faculty, it is found that 45 percent are vocational and 55 percent are nonvocational faculty members.

In summary, the literature on women in public education seems to indicate that although females have extensively participated in public education, their roles have largely been as teachers. Further, the commitment of women to the teaching profession has not been total, perhaps reflecting a realistic assessment on their part of the limited opportunities for promotion. When the participation of women in public education is compared among educational levels, it appears that their participation decreases as the level of education increases.

Studies of school administration graduate programs indicate that women are grossly out numbered by men as faculty members and as graduate students. Governmental financial aid programs aimed at strengthening the educational profession appear to have excluded women to a great extent. Finally, women's involvement in secondary public vocational education appears to be limited to homemaking and clerical educational programs. Whereas, women in post-secondary vocational education seem to be concentrated in health, business, and home economic educational programs.

Chapter 3

PROCEDURE

The study described herein had a two-fold purpose: 1) to determine the status of professional women and of school administrators in comprehensive high school vocational programs, and 2) to determine the differences in perceptions of female vocational faculty members as seen by themselves and by the vocational education directors in comprehensive high schools. In this chapter the procedures used in designing the research instrument, the selection of the samples used and the data collection process, the data collection results, and the statistical analysis of the data will be discussed.

Design of the Research Instrument

Since this study had a two-fold purpose it was necessary to develop a two-part instrument to achieve the objectives of the research. The first part was designed to measure status and the second part to measure differences in perceptions between female vocational faculty and vocational education directors in comprehensive high schools. A copy of this two-part instrument can be found in Appendix B.

To design the first part of the instrument, several demographic data models were studied and related literature was reviewed. Once a clear understanding of the required data needed to appraise the status of the female vocational faculty member and the vocational education director was obtained, the instrument to achieve this goal was developed. This instrument was presented to members of the Vocational Education Department at The Pennsylvania State University for their critical analysis. These members were chosen because of their expertise with these types of instruments and because of their involvement in the construction of a similar instrument that was used to measure the status of female vocational faculty and administrators in community colleges. Through recommendations from the Vocational Education Department members, unnecessary information was deleted and the instrument was expanded in areas where additional information was deemed beneficial.

The second part of the instrument was designed to measure the differences between the perceptions of female vocational faculty and vocational education directors in comprehensive high schools in evaluating the roles, advancement possibilities, and aspirations of female vocational faculty members. Since this study is one of four, each designed to examine the role of female vocational faculty in selected types of institutions (vocational schools, comprehensive high schools, public community-junior colleges, and post-secondary proprietary schools), it was necessary to use one instrument designed by Elizabeth C. King who conducted the public community-junior college study. Thus, some comparisons could be drawn among the perceptions of the roles, advancement possibilities, and aspirations of female vocational faculty in the institutions previously mentioned. Although the second part of the instrument was not modified in content, it was necessary to modify the language in one item in order to make the instrument applicable to the comprehensive high school respondents. The original scale was developed for use by public community-junior college female vocational faculty and the vocational education directors. The item that required modification was item number 24 in part two of the questionnaire. The item originally stated, "Most women would like to end their educational careers as full professors." It was modified to read, "Most women, in your school, would like to end their educational careers as high school teachers."

Selection of the Samples Used and the Data Collection Process

Vocational Education Directors. In the selection and sampling strategy of vocational education directors in comprehensive high schools, the following steps were taken:

1. From a population of 15,314 comprehensive high schools located in the 50 states, the Canal Zone, Puerto Rico, and the Trust Territory, a total of 482 schools were randomly selected to be sampled. The technique used to determine the sample size for this activity was developed by Krejcie and Morgan in 1970. The addresses of these randomly selected comprehensive high schools were obtained from the Directory of Secondary Schools with Occupational Curriculums Public-Nonpublic 1971. It should be noted that although the directory gave public and nonpublic schools the sampling was restricted to public schools.

2. In the upper left hand corner of the first part of the two-part instrument (questionnaire) a 10 digit coding system was introduced to identify the vocational education directors for follow-up purposes. The first three digits of this coding system identified each of the 482 comprehensive high schools previously selected. The fourth digit identified the accreditation region in which the school was located (1 = Middle States Association, 2 = North Central Association, 3 = New England Association, 4 = Northwest Association, 5 = Southern Association, and 6 = Western Association). The fifth digit identified the respondent as a vocational education director. Digits 6, 7, 8 and 9 identified

the number of vocational students attending the comprehensive high school as listed in the Directory of Secondary Schools with Occupational Curriculum Public-Nonpublic 1971. The tenth digit identified the correspondences sent to the directors. A zero in the tenth digit indicated that it was the first correspondence with the vocational education director. A number 1, 2, or 3 indicated the number of follow-ups mailed to the director.

3. Once the schools for the sample were selected, the following materials were mailed: 1) a cover letter describing the study, asking for the completion of an enclosed questionnaire, and requesting a roster indicating the vocational teachers and administrative staff identified by sex and the courses assigned to them; 2) a two-part instrument or questionnaire (see Appendix B); and 3) a self-addressed prepaid return envelope for the questionnaire and roster. These materials were mailed on January 7, 1974 to the directors of vocational education in the 482 schools previously mentioned.

Based upon the results obtained from the materials mailed on January 7, 1974, two main categories were created: 1) those vocational education directors who did not respond, and 2) those vocational directors who responded. On January 24, 1974, Follow-up Letter I (see Appendix C) and the questionnaire were sent to the non-respondent vocational education directors. Follow-up Letter I requested the completion of the questionnaire, and a roster indicating the vocational teachers and administrative staff identified by sex and the courses assigned to them. Two weeks later, on February 8, 1974, Follow-up Letter I and the questionnaire were again sent to those vocational education directors who had not yet responded. In a final effort to increase the responses, Follow-up Letter I and the questionnaire were again mailed to those directors who had not responded by February 21, 1974.

Those vocational education directors that had responded were classified into five groups.

Group I. This group consisted of those vocational directors who returned the questionnaire completed and a roster indicating the vocational teachers and administrative staff and the courses assigned to them.

Group II. This group contained the vocational directors who returned the questionnaire completed but who did not send a roster.

Group III. This group was formed with the vocational directors who returned the questionnaire completed and a roster indicating the vocational teachers and administrative staff but who did not indicate the courses assigned to them.

Group IV. This group included all the vocational directors who indicated that they did not have female vocational faculty on their staff.

Group V. This group was composed of the vocational directors who indicated that their schools had terminated all vocational programs.

No follow-up letters were sent to Groups I, IV and V. Follow-up Letters II and III (see Appendix C) were sent to Groups II and III between January 18, 1974 and February 21, 1974. Follow-up Letter II requested a roster or list of the vocational faculty identified by sex and their teaching assignment and Follow-up Letter III requested the courses assigned to the vocational teachers. These follow-up letters (II and III) were never sent more than three times to any one vocational director.

Female Vocational Faculty. From the rosters received in Group I (those vocational directors who returned the questionnaire completed and a roster indicating the vocational teachers and administrative staff and the courses assigned to them), the names of 620 female vocational faculty were obtained. Since the number of names obtained was relatively low, the total 620 were utilized.

The 10 digit coding system in the upper left hand corner of the first part of the instrument was also used to identify the female vocational faculty for follow-up purposes. This coding system followed a different pattern than that used for the vocational directors. The first three digits of this coding system identified the school in which the female vocational faculty member worked. The fourth digit identified the accreditation region in which the school was located. The fifth digit identified the respondent as a female vocational teacher. Digits 6, 7 and 8 identified each one of the female vocational faculty. The ninth digit identified the area in which the female vocational teacher taught (1 = agricultural education, 2 = business education, 3 = distributive education, 4 = home economics education, 5 = trade and industrial education, 6 = health education, 7 = technical education, and 8 = other). The tenth digit identified the correspondences sent to the female vocational teachers. A zero in the tenth digit indicated that it was the first correspondence with the female vocational teacher. A number 1, 2 or 3 indicated the number of the follow-ups mailed to the teacher.

The following materials were mailed to all 620 female vocational faculty: 1) a cover letter describing the study and asking for the completion of an enclosed questionnaire, 2) a two-part questionnaire (see Appendix D), and 3) a self-addressed prepaid return envelope for the questionnaire.

From the results obtained from the materials mailed to the female vocational faculty, two categories were created: 1) those female vocational faculty who did not respond, and 2) those female vocational faculty who responded. Follow-up Letter IV (see Appendix E) and the questionnaire were sent on March 15, 1974 to the non-respondent female vocational faculty. On March 29, 1974, Follow-up Letter IV was sent again to those who did not respond and on April 12, 1974, Follow-up Letter IV was again sent in a final effort to increase the responses. This follow-up letter was never sent more than three times to any one female vocational teacher.

Data Collection Results

From the original population of 15,314 comprehensive high schools located in the 50 states, the Canal Zone, Puerto Rico and the Trust Territory, 482 schools were selected randomly to be used as the sample for the study. Table 3.1 shows the population and sample used in the study by region of accreditation.

Vocational Education Directors. The results of the data collection process revealed that out of the 482 vocational education directors sampled, 125 (25.9 percent) did not respond and the remaining 357 (74.1 percent) responded as follows: 1) the majority of these directors, 183 (38.0 percent), sent the questionnaire completed and a roster with the vocational teachers and administrative staff and the courses

Table 3.1

Population and Sample of Comprehensive High Schools in the United States and its Territories by Region of Accreditation

Region of Accreditation	Percentage of the Total Number of Comprehensive High Schools	Percentage of the Total Number of Comprehensive High Schools Sampled
Middle States Association (MSA)	16	16
North Central Association (NCA)	38	40
New England Association (NEA)	3	4
North West Association (NWA)	7	6
Southern Association (SA)	30	30
Western Association (WA)	5	4
Others	1	0
Totals	100%	100%

assigned to them, 2) one hundred eight (22.4 percent) of the directors returned the questionnaire completed but did not send a roster, 3) twenty-three (4.8 percent) of the administrators, although they returned the questionnaire completed and a roster indicating the vocational teachers and administrative staff, failed to indicate the courses assigned to their faculty, 4) thirty-one (6.4 percent) of the directors indicated that they did not have female vocational faculty on their staff, and 5) twelve (2.5 percent) of the directors indicated that their schools had terminated all vocational education programs.

Female Vocational Faculty. Responses were obtained from 512 (82.6 percent) of the 620 female vocational teachers sampled. Table 3.2 shows the female vocational teachers sampled and those who responded by region of accreditation.

Statistical Analysis of the Data

The final data analysis was performed using 314 administrators and 512 female vocational teachers. These administrators and teachers came from the following groups: 1) those vocational directors who returned the questionnaire completed and a roster indicating the vocational teachers and administrative staff and the courses assigned to them (Group I); 2) those vocational directors who returned the questionnaire completed but who did not send a roster (Group II); 3) those vocational directors who returned the questionnaire completed and a roster indicating the vocational teachers and administrative staff, but who did not indicate the courses assigned to them (Group III); and 4) all the female vocational faculty that responded.

Several statistical treatments were utilized to analyze the data and to answer the questions and hypotheses posed. In answering Part I,

Table 3.2

Sample and Response of Female Vocational Teachers in Comprehensive High Schools in the United States and its Territories by Region of Accreditation

Region of Accreditation	Percentage of the Total Female Vocational Teachers Sampled	Percentage of the Total Female Vocational Teachers that Responded
Middle States Association (MSA)	18	18
North Central Association (NCA)	41	41
New England Association (NEA)	2	2
North West Association (NWA)	7	7
Southern Association (SA)	26	27
Western Association (WA)	6	5
Totals	100%	100%

073

Question #1, the means, standard deviations, and ranges were used. Question #1 was designed to give a profile of the average female vocational faculty member and the average vocational education director in comprehensive high schools. Specifically, Question #1 stated: What are some of the biographical characteristics of the female vocational faculty members and the vocational education directors in comprehensive high schools as measured by: 1) their age, 2) their marital status, 3) the number of children they have, 4) the type of work appointment they hold, 5) the number of years they have worked at their present institution, 6) the number of promotions they have received at their present institution, 7) their annual salary, 8) the highest degree they have earned, 9) the type of certificate they hold, 10) the year they earned their highest degree, 11) their continuing education efforts, 12) their typical weekly work load, and 13) their work experience. In computing the means and the standard deviations the following mathematical formulas were employed:

$$\overline{X} = \frac{\Sigma X}{n} \qquad s = \sqrt{\frac{\Sigma(X-\overline{X})^2}{n-1}}$$

where

$\overline{X}$ = the mean

Σ = the sum of

X = each of the individual measurements or scores

n = the number of measurements performed or cases

s = the standard deviation

Although the range is the highest measurement obtained (X_n) minus the lowest measurement obtained (X_1), the lowest and the highest score were reported in this study as the range. The STSUM (Statistical Summary) was used for the previously stated analysis. All the computer programs that were employed in this study are available at The Pennsylvania State University's Computation Center.

In answering Question #2 in Part II of this study an item analysis of each subscale (dual-role conflict, advancement possibilities and professional aspirations) was conducted. Question #2 was designed to determine how female vocational faculty and administrators perceive female vocational faculty in terms of the dual-role conflict, advancement possibilities, and professional aspirations.

In answering Questions #3, #4, #5, #6, and #7 in Part II of this study (which were designed to determine if there were any relationships between the age of female vocational teachers and vocational education directors, the number of years at their present institution, their salary, and the year they received their highest degree and their perception of the dual-role conflict, advancement possibilities, and professional aspirations of female vocational teachers for the female vocational faculty member and the vocational education director), multiple regression analysis techniques were employed. Multiple regression analysis techniques are usually employed to predict a desired outcome (criterion variable) from a set of independent variables. The multiple regression analysis model used was a linear function which can be represented mathematically as follows:

$$Y = a_0+a_1 X_1+a_2 X_2+. . .+a_k X_k+e$$

where

Y = dependent variable or criterion variable

$X_1,X_2,. . .,X_k$ = independent variables

$a_0, a_1, a_2, \ldots a_n$ = partial regression coefficients

e = error compensation term.

The QSASE Analysis program was utilized to measure the multiple linear regression analysis in the study. In using the multiple regression analysis model the following assumptions were made: 1) each array of Y of the population follows the normal distribution; 2) the regression Y on $X_1, X_2, \ldots, X_k$ is linear; 3) the variances of the arrays of Y of the population are equal; 4) the samples are drawn at random; and 5) the X values remain constant for all samples (Li, 1967:95).

In responding to Part III of this study (which was designed to determine if there were significant differences between the female vocational faculty and vocational education directors in their perception of the dual-role, advancement possibilities and professional aspirations of female vocational faculty members), the Behrens-Fisher Test t' was utilized.

The choice of this test was motivated by the need to overcome the weakness of the regular t test. Usually, a t test is performed when testing a hypothesis to prove that the difference between the means of two samples is equal to zero ($\overline{X}_1 - \overline{X}_2 = 0$) against the alternative hypothesis that the difference between the means of two samples is different from zero ($\overline{X}_1 - \overline{X}_2 \neq 0$); however, the problem with the regular t test is that it looses power if the assumption of the homogeneous variance is not met. In order to overcome the violation of homogeneous variances, the Behrens-Fisher Test t' is used. This test does not require homogeneous variance or equal samples ($n_1 = n_2$).

According to Kohr (1970) the Behrens-Fisher Test t' works very well with only a small loss of power compared to the t test when all assumptions are met. Where the assumptions are not met, and $n_1 \neq n_2$, the Behrens-Fisher Test t' is a much stronger test. Further support for the Behrens-Fisher Test t' is provided by Games (1972) who states that in times of doubt as to which test to use, the universal application should be the Behrens-Fisher Test t'.

The mathematical expression of the Behrens-Fisher Test t' is as follows:

$$t' = \frac{\overline{X}_1 - \overline{X}_2}{s_1^2/n_1 - s_2^2/n_2}$$

where

$\overline{X}_1$ = mean of sample 1

$\overline{X}_2$ = mean of sample 2

s_1^2 = variance of sample 1

s_2^2 = variance of sample 2

n_1 = number of cases in sample 1

n_2 = number of cases in sample 2

t' = Behrens-Fisher Test

The computer program with the Behrens-Fisher Test was contained in a package under the title of Population Mean Tests with Unpaired Observations.

Chapter 4

ANALYSIS OF THE BIOGRAPHICAL DATA

This chapter deals with the analysis of the biographical data which was acquired to give a profile of the female vocational faculty and the vocational education directors in comprehensive high schools. Specifically this chapter answers Part I, Question #1 of the study which stated:

Question #1. What are some of the biographical characteristics of the female vocational faculty members and the vocational education directors in comprehensive high schools as measured by: 1) their age, 2) their marital status, 3) the number of children, 4) the type of work appointment they hold, 5) the number of years they have worked at their present institution, 6) the number of promotions they have received at their present institution, 7) their annual salary, 8) the highest degree they have earned, 9) the type of certificate they hold, 10) the year they earned their highest degree, 11) their continuing education efforts, 12) their typical weekly work load, and 13) their work experience?

An examination of Question #1 revealed a number of facts, which are described in the following paragraphs, graphs and tables.

Female Vocational Faculty

The analysis of the biographical data for the female vocational faculty in comprehensive high schools revealed that:

1. The average female vocational faculty member is 38 years of age, married, with 2.2 children and earns an annual salary of about $10,000.

2. Two-thirds of these female teachers have obtained a bachelor's degree and nearly one-third have a master's degree.

3. Two out of five female teachers finished their highest degree between 1970 and 1973, and nearly three-fourths have completed their highest degree since 1960.

4. Nine out of ten have a permanent teaching position in the school, where they have worked an average of 7.4 years without receiving a promotion.

5. Two-thirds of the female vocational teachers hold permanent certification in the field they are teaching.

6. More than two-thirds indicated they were not pursuing another degree.

7. The average female vocational faculty member has been teaching for 9.8 years and has worked in vocational education for 7.3 years.

8. About one-fifth of these teachers indicated they work approximately 10 hours per week in administrative work and almost half of them stated they work 16 hours per week teaching laboratory shop.

9. Half of the teachers indicated they lecture 13 hours per week and three out of five stated they spend about 20 hours per week in other school related activities.

10. One out of twenty females indicated she had been employed in school administrative work and one out of seven stated she had worked in industry.

11. More than one out of five female teachers indicated they had worked in other areas (such as the armed forces, government work, home demonstration, hospital work, and self-employment) for an average of 6.6 years.

12. Almost half of the teachers (47.2 percent) indicated that they teach home economics and more than two-fifths (41.0 percent) stated that they teach business education.

13. Fewer than one out of ten of these female faculty members indicated that they teach in the following four areas: health education (3.4 percent), distributive education (2.2 percent), trade and industrial education (1.8 percent), and agricultural education (.2 percent).

14. No female teachers were found to be teaching technical education.

The results outlined in the preceding paragraphs give a good assessment of the profile of the typical female vocational faculty member in comprehensive high schools. Further analysis of the data can be found in graphs 4.1 through 4.10, tables 4.1 through 4.4 and in Table 1 in Appendix F.

Vocational Education Directors

The examination of the biographical data for the vocational education directors in comprehensive high schools showed that:

1. The average vocational education director in a comprehensive high school is a male 43 years of age, married, with 2.5 children, and earns an annual salary of almost $14,200.

2. Three-fourths of the directors have a master's degree.

3. Nearly one-third of the directors finished their highest degree between 1970 and 1973, and almost three-fourths have completed their highest degree since 1960.

4. More than nine out of ten directors indicated that they have a permanent administrative appointment in the school where they have worked an average of 9.2 years, while only half of them indicated that they have permanent administrative certification.

5. Four out of five directors stated that they have permanent teaching certification and more than one out of five have permanent supervisory certification.

6. Almost three-fourths of the directors indicated that they are not pursuing studies leading to another degree.

7. The average director had 9.9 years of teaching experience, had worked in vocational education for 8.5 years and in administration for 8.4 years.

8. Seven out of ten administrators indicated that they spend 37.3 hours per week in administrative work and more than one-fourth stated that they spend 19.3 hours per week in other school related activities.

9. One-fifth of the administrators stated that they work 16.5 hours per week teaching laboratory shop and more than one-fourth indicated that they lecture an average of 12 hours per week.

10. Nearly one-third of the administrators indicated that they had worked in industry for an average of 5.4 years and more than one out of five stated that they had worked in other areas (such as the armed forces, government work, and self-employment) for an average of 6.6 years.

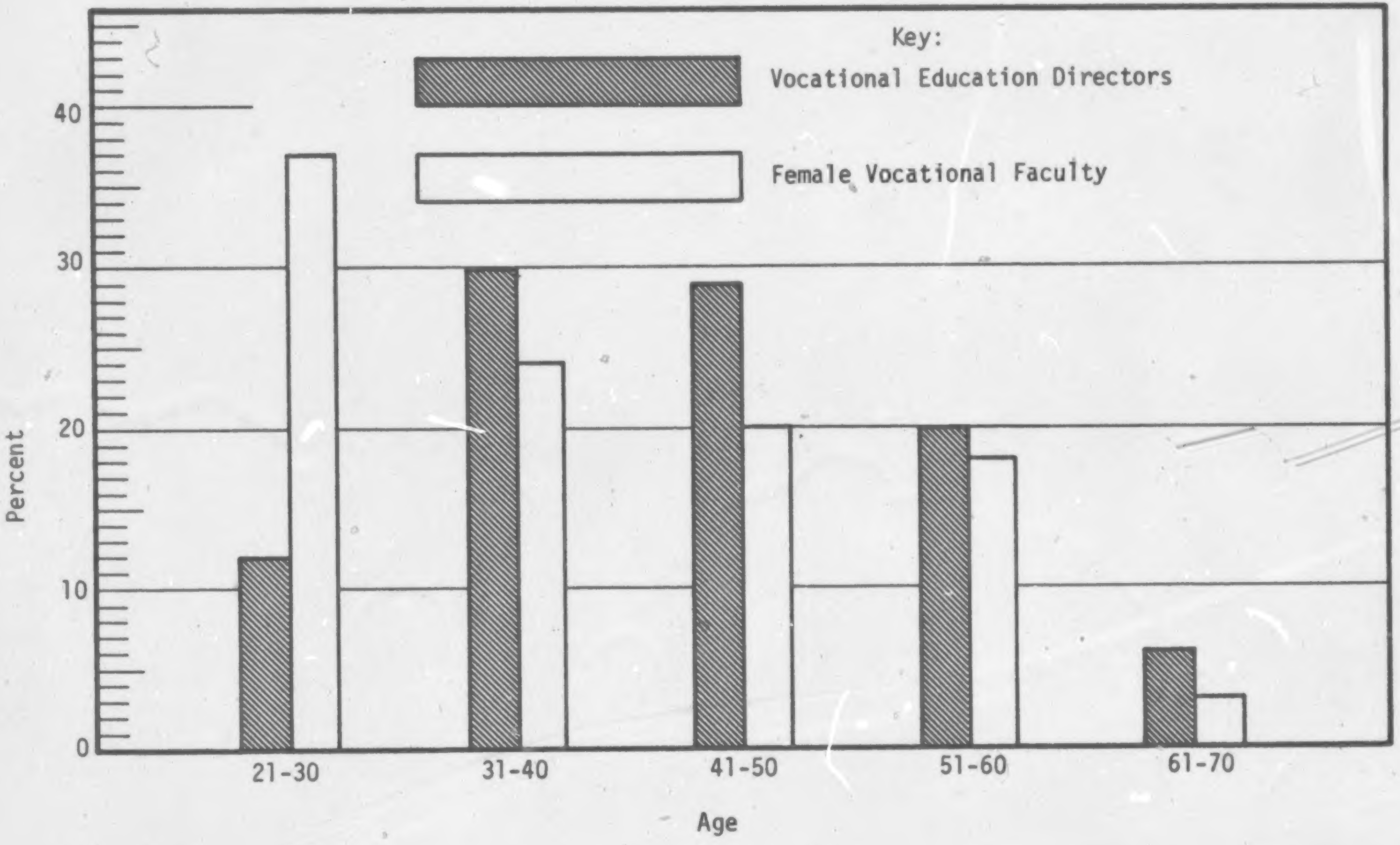
The results outlined in the preceding paragraphs give a good assessment of the profile of the typical vocational education director in comprehensive high schools. Further analysis of the data can be found in graphs 4.1 through 4.10, tables 4.1 through 4.4 and in Table 1 in Appendix F.

Age Distribution

A combined analysis of the age distribution of the female vocational faculty and the vocational education directors in comprehensive high schools is illustrated in Graph 4.1. The age distribution graph revealed that the percentage of female vocational faculty members working in comprehensive high schools increases as their ages decrease; and that the greatest percentage of these teachers (37 percent) are between the ages of 21 and 30. The directors' age distribution, on the other hand, tends to follow a normal distribution curve with the greatest percentage of directors (30 percent) being between the ages of 31 and 40. Further analysis of the age distribution data revealed that the average vocational education director, who is 42.8 years old, is 4.9 years older than the average female vocational teacher, who is 37.9 years old.

Marital Status

The marital status of the female vocational faculty members and the vocational education directors in comprehensive high schools is presented in Table 4.1. When the marital status data is examined, it is found that two out of three female vocational faculty members were married and nine out of ten directors were married. On the other hand, one out of three female vocational faculty members were categorized as non-married (single, divorced, separated, or widowed), but only one out



Graph 4.1. Age Distribution of Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

of ten of the vocational education directors. Single women accounted for three out of five of the females in the non-married category. Whereas, two out of three vocational education directors in the non-married category indicated they were single.

Table 4.1

Marital Status of Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

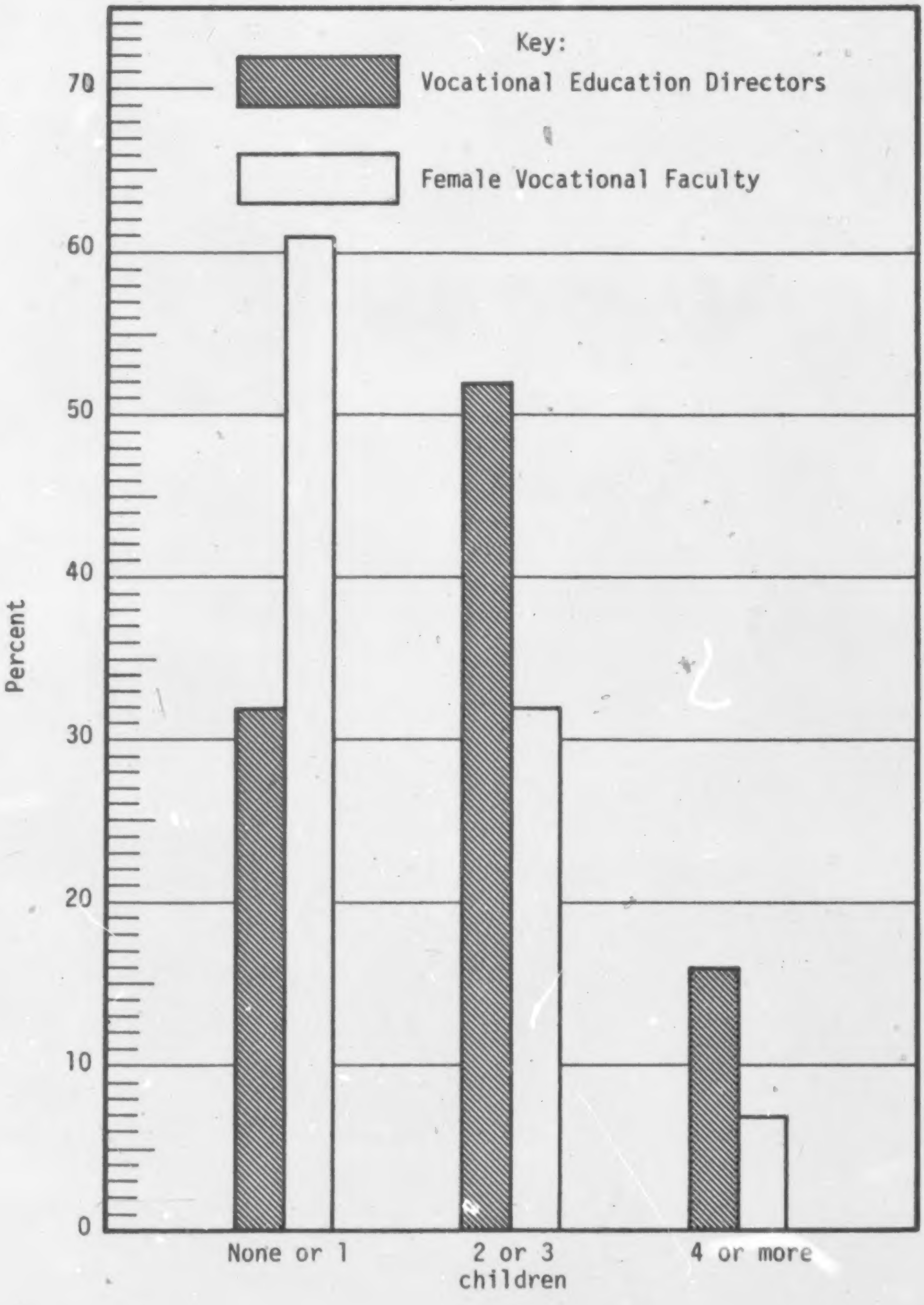
	Married	Non-Married
Female Vocational Faculty	69%	31%
Vocational Education Directors	89%	11%

Number of Children

The number of children that the female vocational faculty members and the vocational education directors in comprehensive high schools have is displayed in Graph 4.2. When the data on the number of children is examined deeper, it is found that although the average female vocational faculty member had 2.2 children, almost half of these females indicated that they had no children and only one out of seven directors had no children.

Type of Work Appointment

The type of work appointment held by the female vocational faculty members and the vocational education directors in comprehensive high schools is illustrated in Table 4.2. A further inspection of the type of work appointment data revealed that nine out of ten of the female vocational faculty members and nine out of ten of the directors had a



Graph 4.2. Number of Children of Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

permanent position in their present institution. It is important to note that although nine out of ten female vocational faculty members had permanent teaching positions, less than seven out of ten had permanent teaching certification. When the directors data is examined, it is found that although nine out of ten directors held permanent positions, only two out of three of them held permanent certification in administration or supervision.

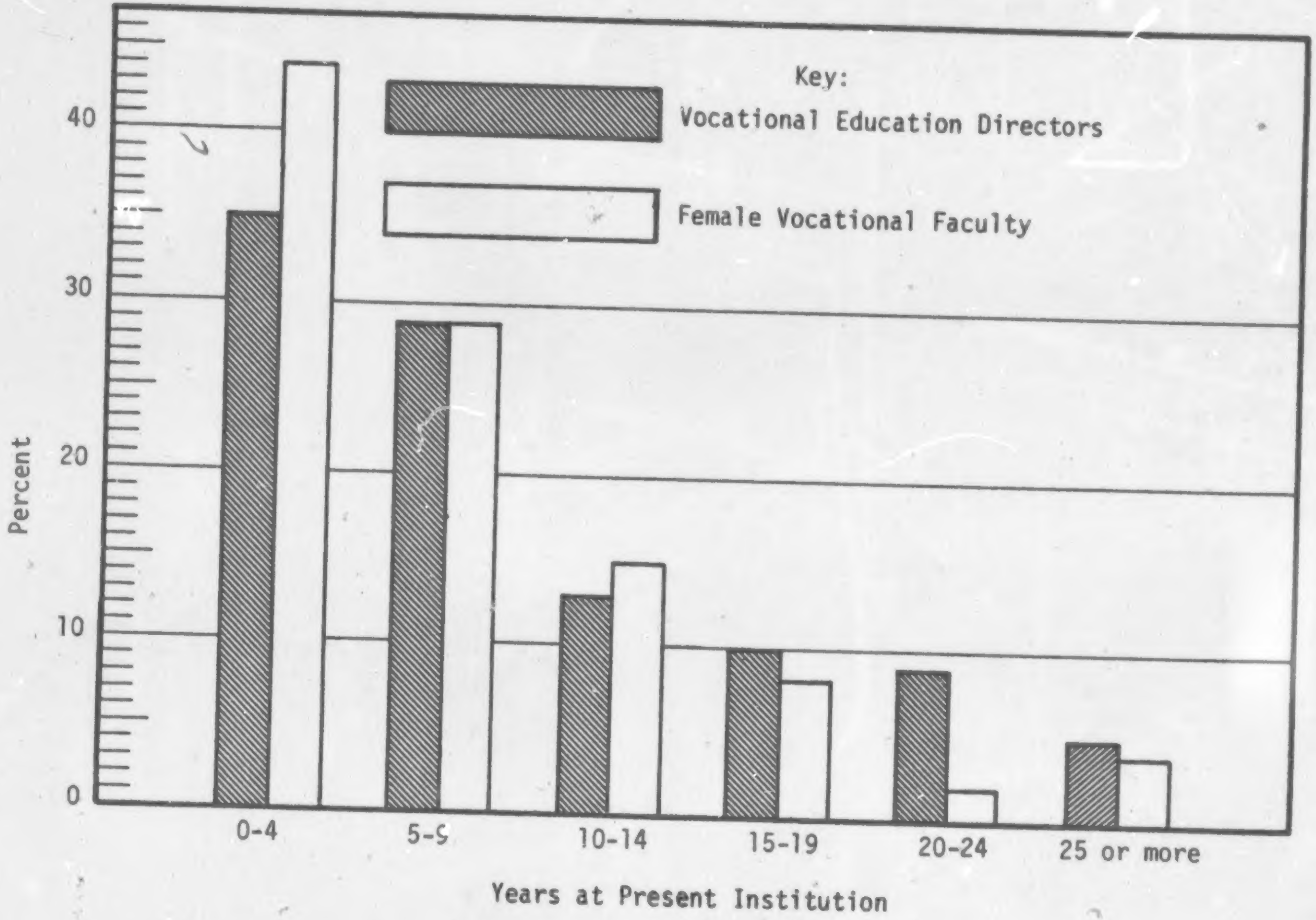
Table 4.2

Type of Work Appointment Held by Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

	Permanent	Temporary
Female Vocational Faculty	91%	9%
Vocational Education Directors	91%	9%

Number of Years at Present Institution

The combined analysis of the number of years that the female vocational faculty member and the vocational education director in comprehensive high schools had been working in their present institution is shown in Graph 4.3. Although the average female vocational faculty member and the average director had worked 7.4 years and 9.2 years respectively in education, almost half of the female vocational teachers and more than one-third of the directors had only worked four or less years in their present institution.



Graph 4.3. Years at Present Institution of Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

Promotions Received at Present Institution

The percentage of the female vocational faculty members and the vocational education directors that had received promotions in their present institution is displayed in Table 4.3. The findings in this area showed that two out of five directors and one out of seven female vocational faculty members had received at least one promotion in their present institution.

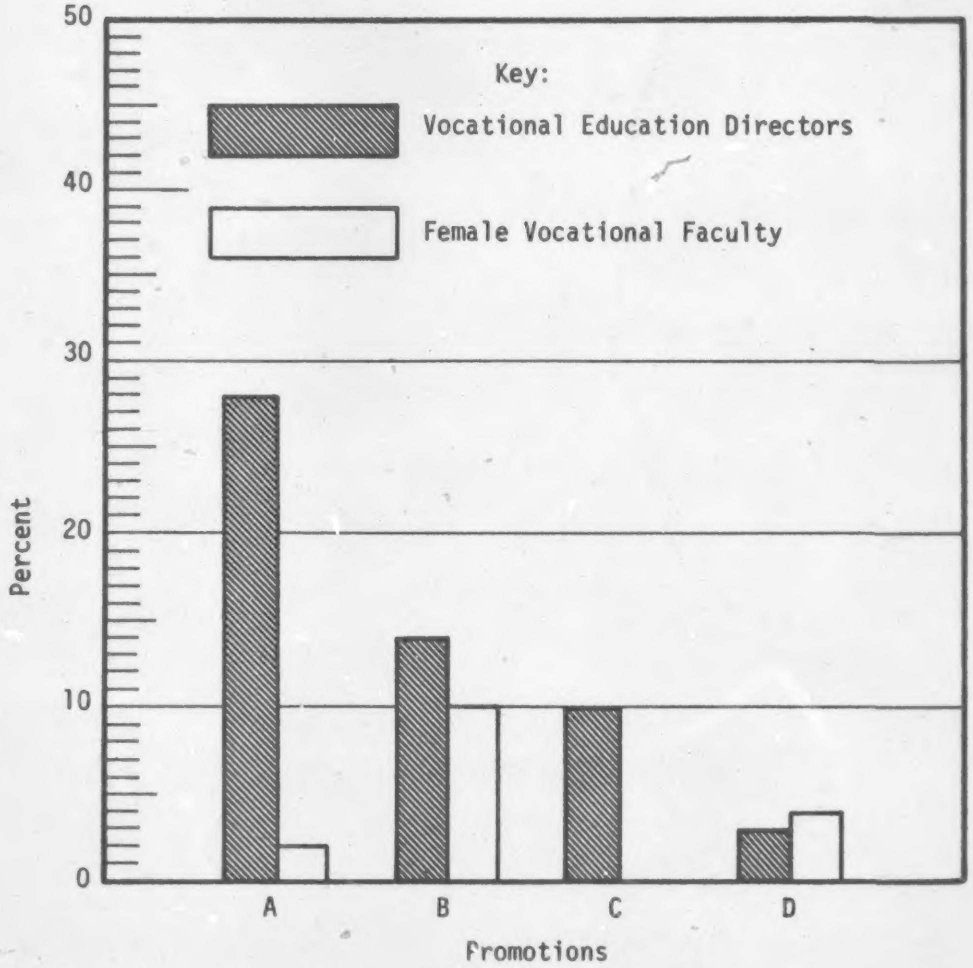
Table 4.3

Promotions Received by Female Vocational Faculty and Vocational Education Directors at Their Present Comprehensive High School

	Received Promotion	Did Not Receive Promotion
Female Vocational Faculty	42%	58%
Vocational Education Directors	85%	15%

Type of Promotions Received

The type of promotions received by the female vocational faculty members and vocational education directors in comprehensive high schools, identified according to the following four areas: 1) full-time teaching to full-time administration; 2) full-time teaching to teaching/administration; 3) teaching/administration to full-time administration; and 4) other types of promotion, are reported in Graph 4.4. The analysis of the type of promotions received indicated that almost one out of three directors had been promoted from a full-time teaching position to a full-time position in administration in their present institution. The findings also revealed that more than half of the directors who indicated that they had been promoted in their schools



A = Full-time Teaching to Full-time Administration
B = Full-time Teaching to Teaching/Administration
C = Teaching/Administration to Full-time Administration
D = Other Types of Promotion

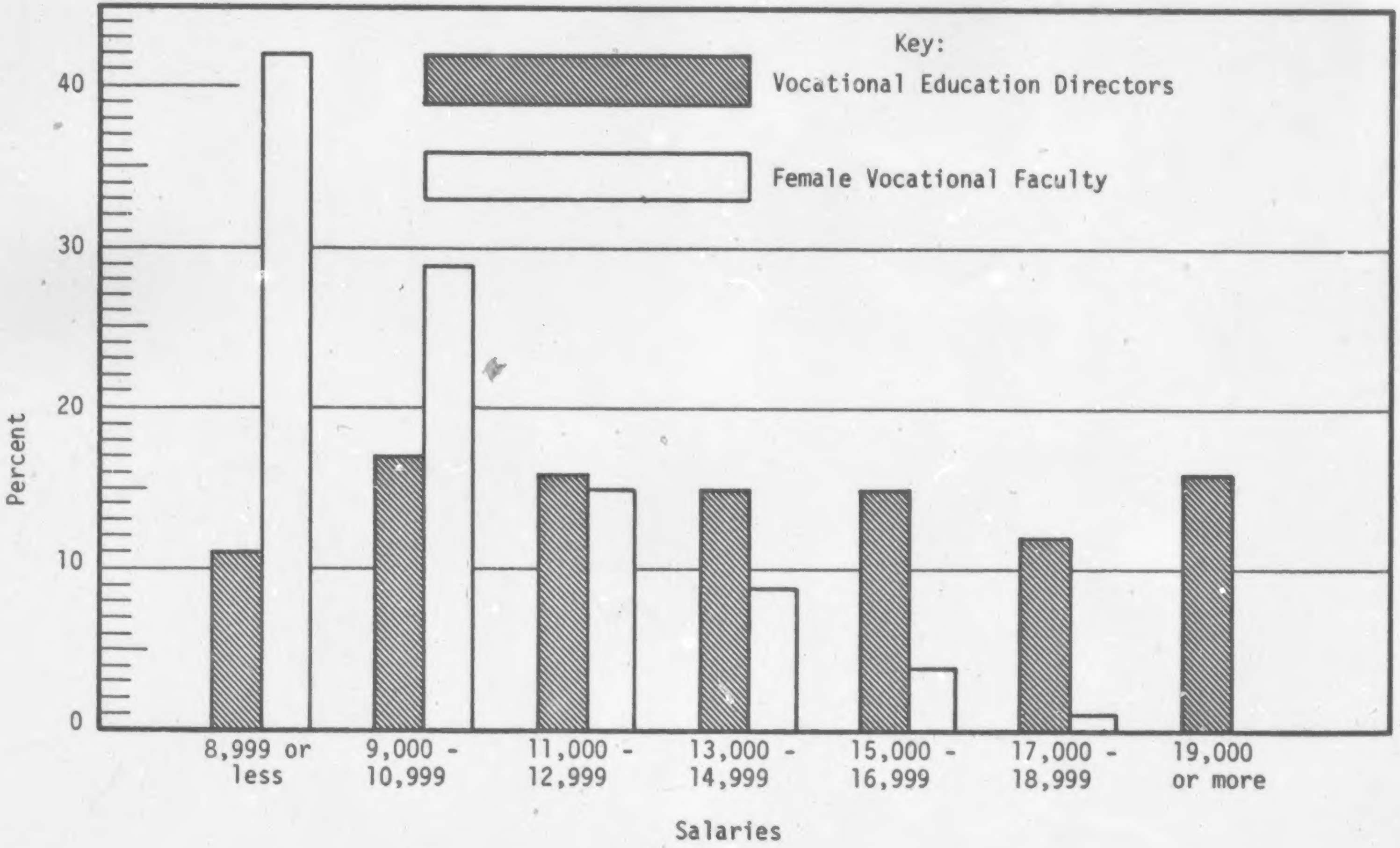
Graph 4.4. Type of Promotion Received by Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools also stated that their promotion was from full-time teaching to full-time administration. Whereas, two-thirds of the female vocational faculty members who indicated that they had been promoted in their schools, also stated that their promotion was from full-time teaching to teaching/administration. Further analysis of the promotion data showed that male vocational faculty members in comprehensive high schools were almost four times more likely to be promoted than their female counterpart. When these male vocational faculty members were promoted, their promotions tended to be from full-time teaching to full-time administration. Whereas, when the female vocational faculty members were promoted, their promotions tended to be from full-time teaching to teaching/administration.

Salaries

A comparative analysis of the salaries of the female vocational faculty members and the vocational education directors is illustrated in Graph 4.5. The average female vocational faculty member earned an annual salary of about $10,000 and the average vocational education director earned approximately $14,200 annually. But, as the graph displays, the annual salaries of the female vocational faculty members are highly concentrated at the lower end of the salary scale, whereas, the salaries of the vocational education directors are more evenly distributed across the salary scale.

Highest Degree Earned

The combined analysis of the highest degree earned by the female vocational faculty members and the vocational education directors in comprehensive high schools is presented in Graph 4.6. The examination



Graph 4.5. Salaries of Selected Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

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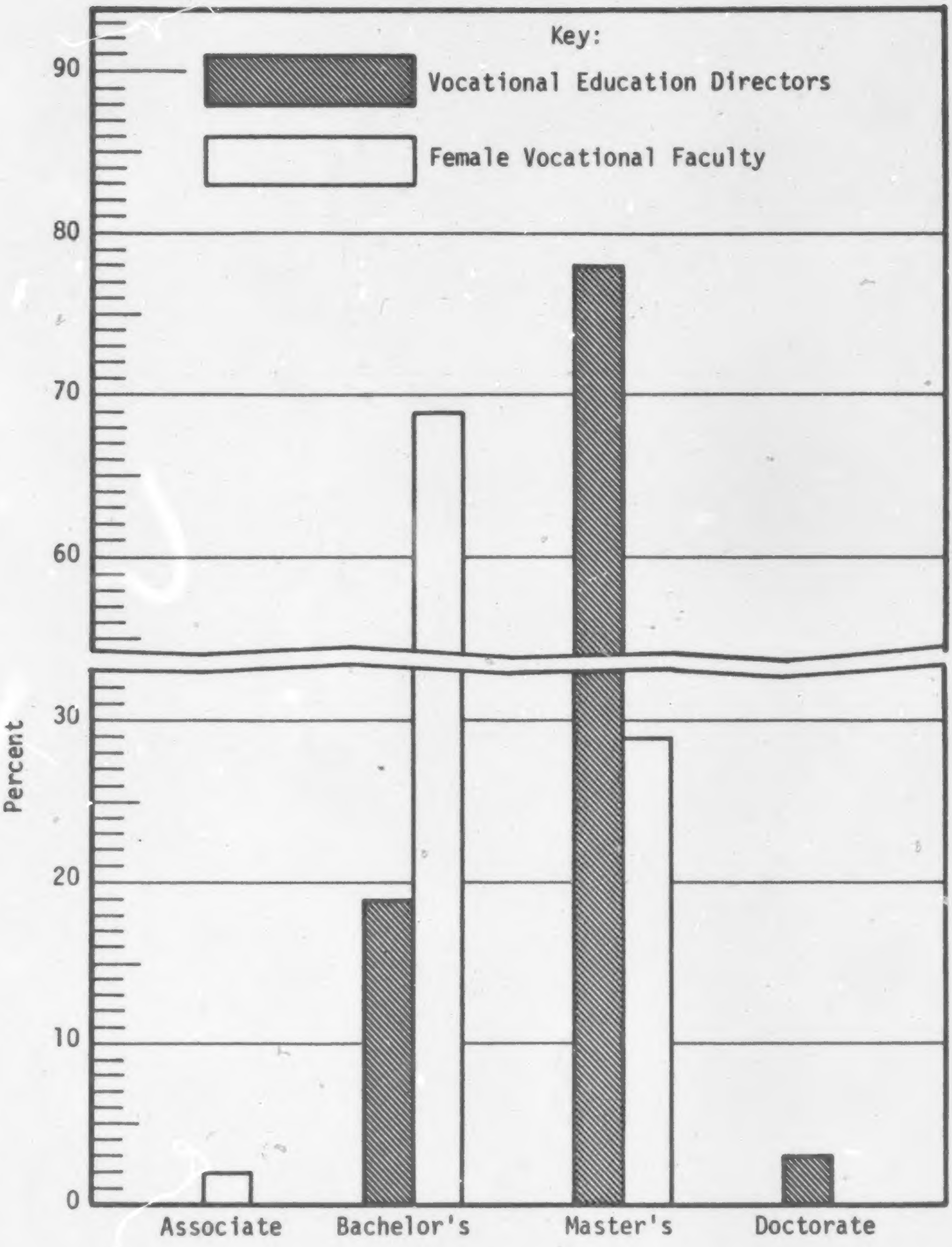


Graph 4.6. Highest Degree Earned by Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

of this data showed that two out of three female vocational teachers stated that their highest degree earned was a bachelor's degree while three out of four directors indicated they had earned a master's degree.

Type of Certification

A comparative analysis of the type of certification held by the female vocational faculty members and the vocational education directors in comprehensive high schools is displayed in Graph 4.7. The analysis indicated that more vocational education directors than female vocational faculty members hold permanent teaching certification.

Year Earned Highest Degree

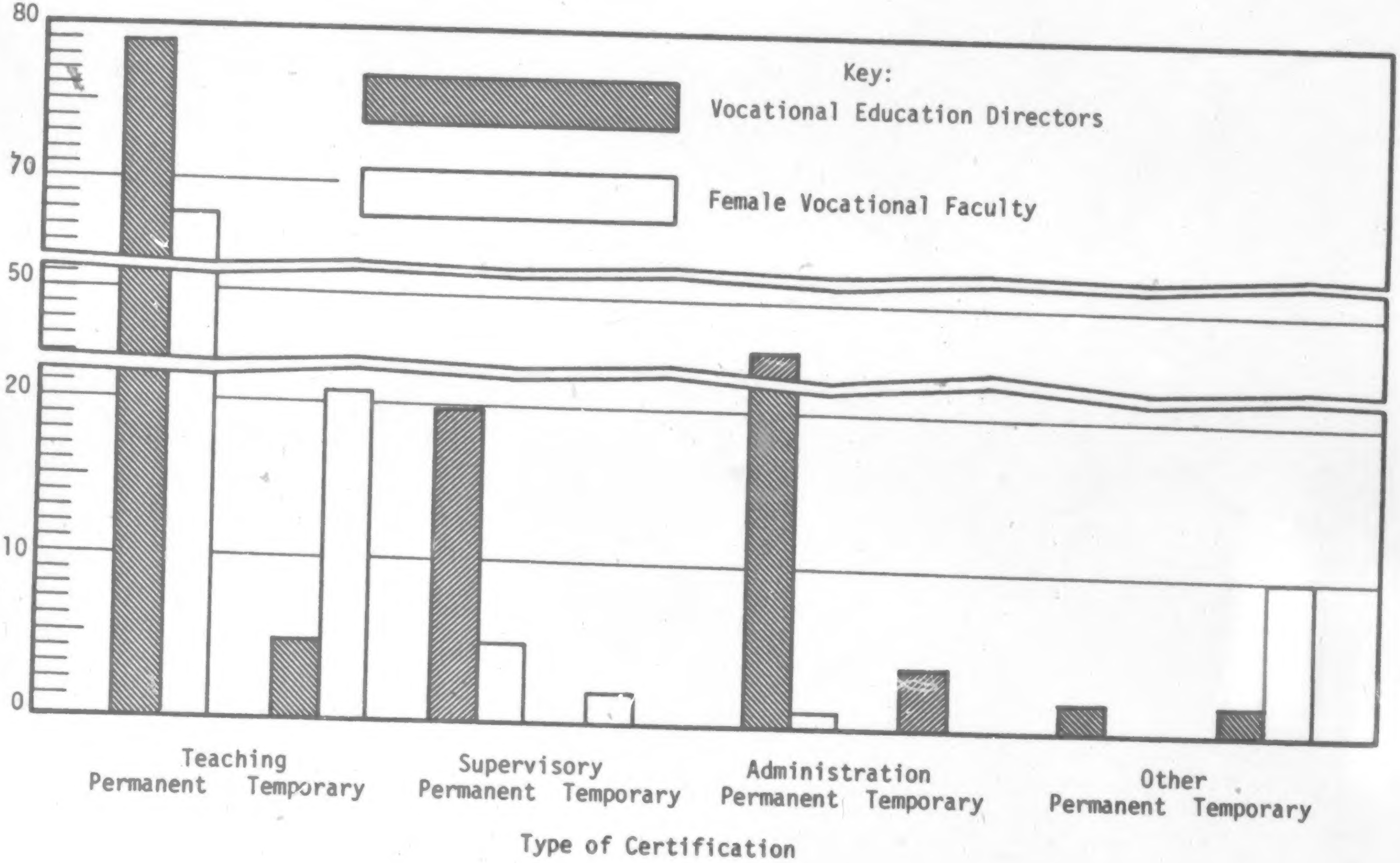
A combined analysis of the year that the female vocational faculty members and the vocational education directors in comprehensive high schools earned their highest degree is shown in Graph 4.8. As the graph indicates, the majority of the female vocational faculty members and the majority of the vocational education directors completed their highest degree between 1965 and 1973.

Pursuing Another Degree

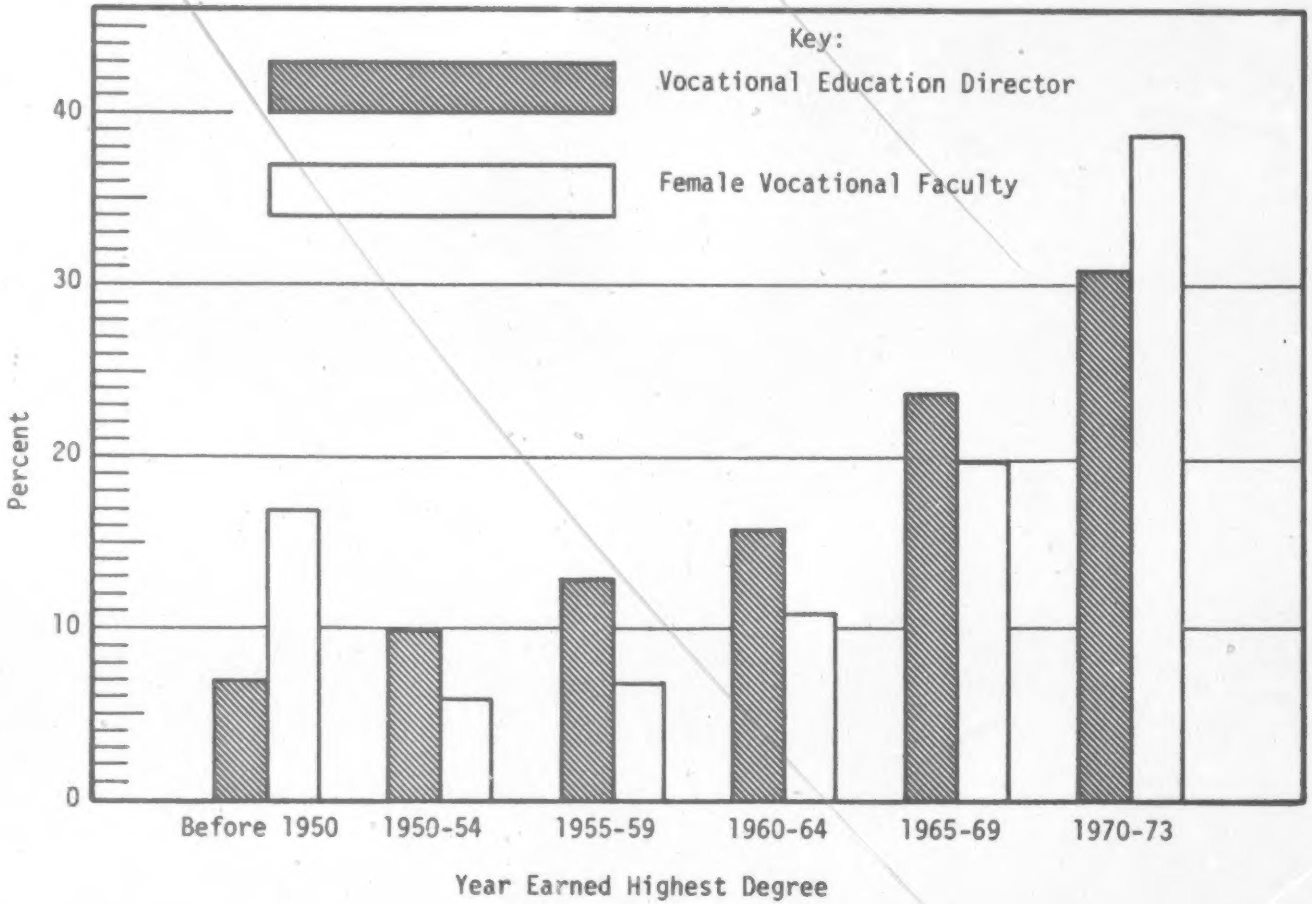
The percentage of female vocational faculty members and the vocational education directors in comprehensive high schools pursuing another degree is displayed in Table 4.4. As the table shows, most of the female vocational faculty members and most of the vocational education directors indicated that they were not pursuing another degree.

Weekly Work Load

The weekly work load of the female vocational faculty members and the vocational education directors in comprehensive high schools is



Graph 4.7. Type of Certification Held by Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools



Graph 4.8. Year Earned Highest Degree for Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

Table 4.4

Percentage of Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools Pursuing Another Degree

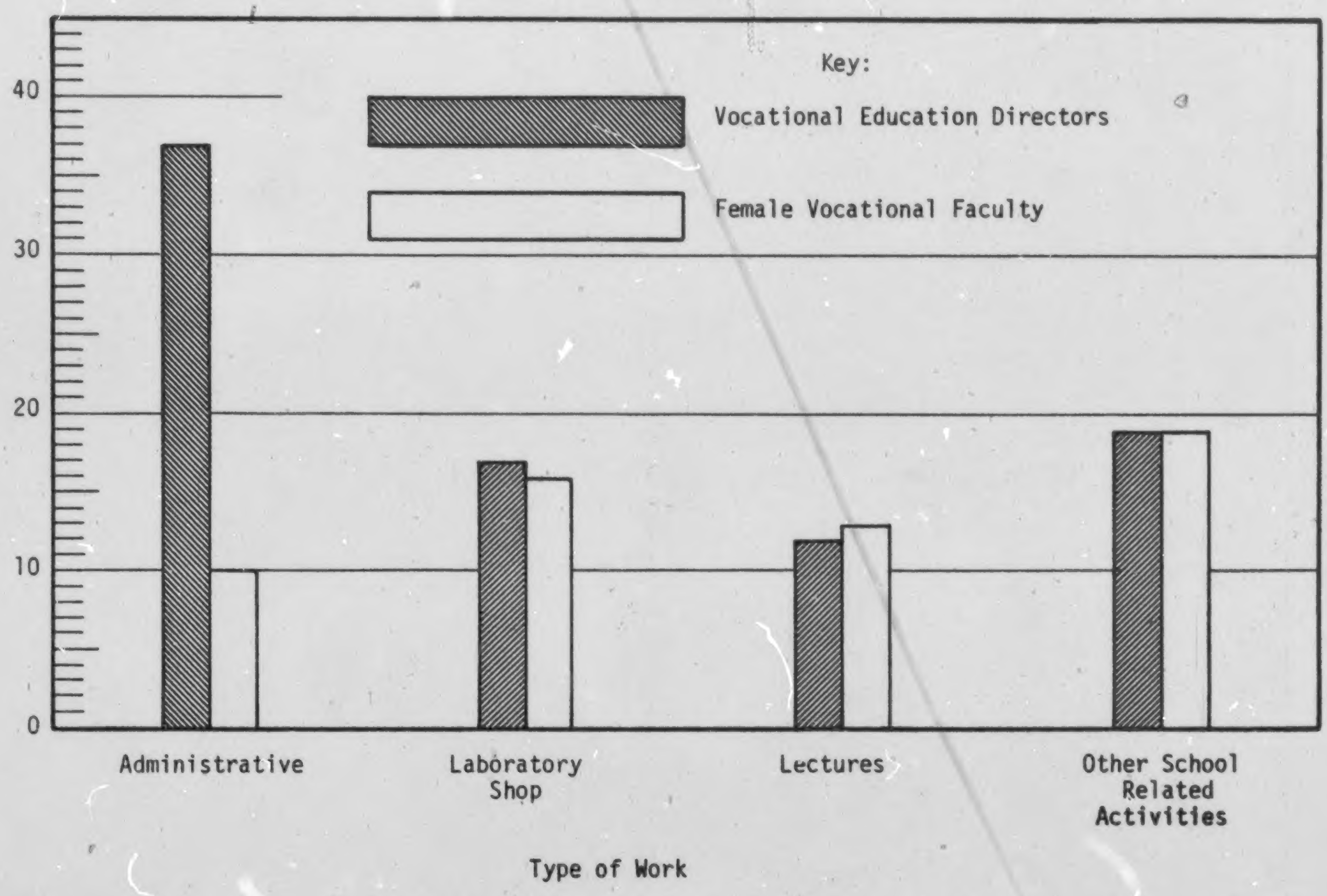
	Pursuing Another Degree	Not Pursuing Another Degree
Female Vocational Faculty	32%	68%
Vocational Education Directors	26%	74%

illustrated by hour in Graph 4.9. The analysis of the female vocational faculty members' weekly work load indicated that: 1) nearly one out of five female teachers worked 10 hours per week in administrative work, 2) about half of the female vocational teachers worked 16 hours per week teaching laboratory shop, 3) nearly half of the female vocational teachers worked 13 hours per week lecturing, and 4) almost half of the female vocational teachers worked 20 hours per week in other school related work.

An analysis of the vocational education directors' weekly work load revealed that: 1) seven out of ten directors worked 37 hours per week in administrative activities, 2) more than one out of five directors worked about 17 hours per week teaching laboratory shop, 3) more than one out of four directors worked 12 hours per week lecturing, and 4) nearly three out of ten directors worked 19 hours per week in other school related activities.

Years of Work Experience

A combined analysis of the number of years of work experience that the female vocational faculty members and the vocational education

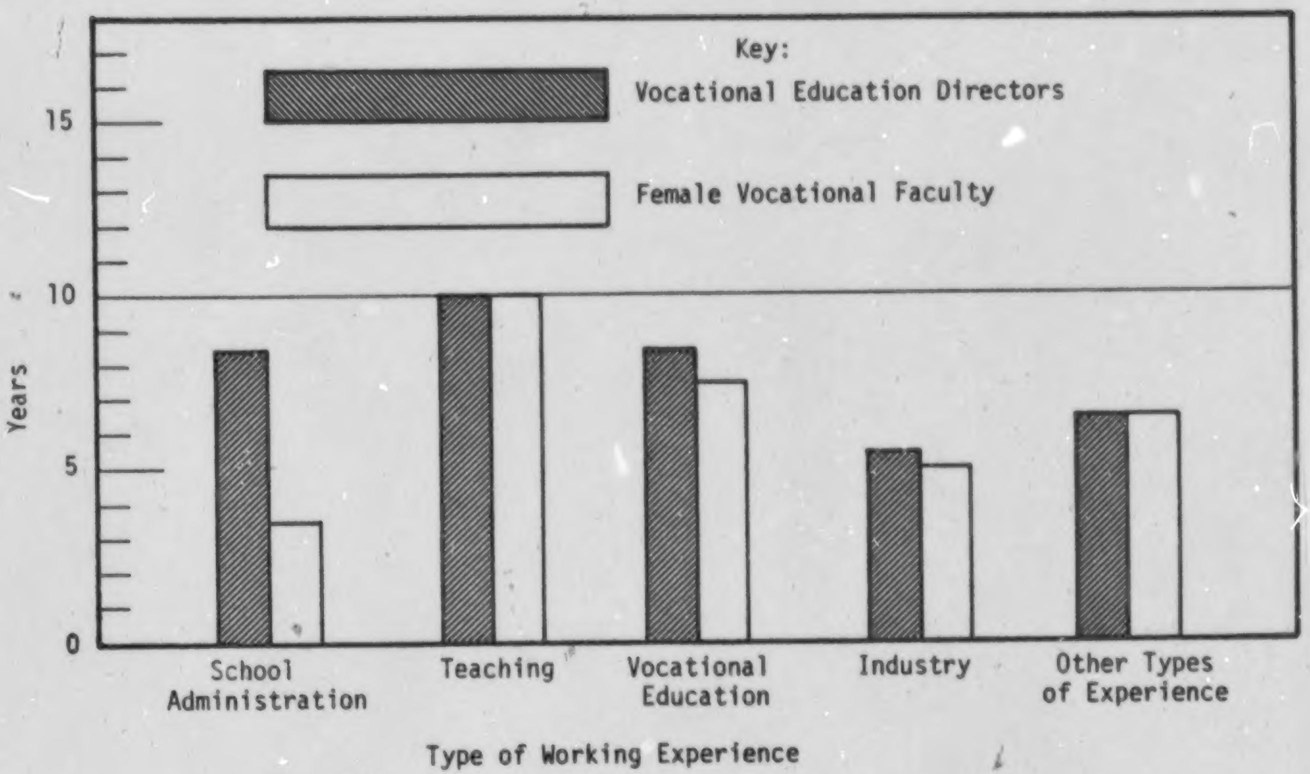


Graph 4.9. Weekly Work Load of Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

directors in comprehensive high schools have had is represented in Graph 4.10. An examination of the female vocational faculty members' working experience revealed that: 1) one out of twenty female vocational teachers indicated that they had an average of 3.6 years of school administration experience, 2) more than nine out of ten female vocational teachers indicated that they had 9.8 years of teaching experience, 3) two out of five female vocational teachers indicated that they had 7.3 years of vocational education experience, 4) one out of seven female vocational teachers indicated that they had 5.2 years of industrial experience, and 5) one out of five female vocational teachers stated that they had worked in other areas (the armed forces, government work, hospitals, and self-employment) for an average of 6.6 years.

An examination of the vocational education directors' working experience revealed that: 1) more than three out of five directors indicated that they had an average of 8.4 years of school administration experience, 2) six out of seven directors stated that they had 9.0 years of teaching experience, 3) one out of three directors indicated that they had 8.5 years of vocational education experience, 4) two out of seven directors stated that they had 5.4 years of industrial experience, and 5) more than one out of five directors indicated that they had worked in other areas (the armed forces, government work, and self-employment) for an average of 6.6 years.

In summary, this chapter presented sufficient facts regarding the status of the average female vocational faculty member and the average vocational education director in comprehensive high schools. From these facts, the following profile of the female vocational faculty



Graph 4.10. Work Experience of Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

member can be drawn. The average female vocational faculty member is 38 years old, married, with 2.2 children and earns an annual salary of $10,000. She has a bachelor's degree, holds permanent certification in her field of specialization, and nine out of ten times is teaching home economics or business education.

The average vocational education director in comprehensive high schools, on the other hand, is a male, 43 years old, married, with 2.5 children, and earns an annual salary of $14,200. He has a master's degree, has a permanent administrative appointment in his present institution and has been working in vocational education for 8.5 years.

Chapter 5

THE PERCEPTIONS OF THE FEMALE VOCATIONAL FACULTY MEMBERS AS SEEN BY THEMSELVES AND BY THE VOCATIONAL EDUCATION DIRECTORS IN COMPREHENSIVE HIGH SCHOOLS

This chapter deals with the analysis of the perceptions that are held by the female vocational faculty members in comprehensive high schools. Specifically this chapter answers Part II, Question #2 of the study which stated:

Question #2. How do female vocational faculty members and vocational education directors in comprehensive high schools perceive the female vocational faculty in their schools in terms of: 1) the dual-role conflict, 2) the advancement possibilities, and 3) the professional aspirations?

In answering Question #2, an item analysis of each subscale (dual-role conflict, advancement possibilities, and professional aspirations) was performed. An examination of this perception data revealed many facts which are reported in the following paragraphs and tables.

Dual-Role Conflict Subscale

The analysis of the 14 item dual-role conflict subscale, which was performed to the female vocational faculty's data and to the vocational education directors' data, revealed the following facts:

1. Eighty-eight percent of the female vocational faculty and 91 percent of the vocational education directors agreed that it is fine for women to work if their children are adequately cared for.

2. The same percentage (88 percent) of the female vocational faculty and the vocational education directors agreed that women can live in productive harmony with men filling complementary roles.

3. Most of the female vocational faculty (52 percent) and 38 percent of the vocational education directors agreed that a mother's working can easily be accepted by a child.

4. Forty-four percent of the female vocational faculty and 42 percent of the vocational education directors agreed that marriage is an asset for professional women while 23 percent of the female vocational faculty and 21 percent of the vocational education directors disagreed.

5. The same percentage of the female vocational faculty agreed as did disagree and the same percentage of the vocational education directors agreed as did disagree (31 percent and 29 percent respectively) that for professional women, children are an asset.

6. The majority (91 percent) of the female vocational faculty and 90 percent of the vocational education directors agreed that it is possible to be successful at both marriage and a career.

7. Sixty-seven percent of the female vocational faculty and 63 percent of the vocational education directors agreed that professional women tend to think of employment as a life-time career.

8. The majority of the female vocational faculty (52 percent) and 39 percent of the vocational education directors disagreed with the statement that a woman's first responsibility is to be a feminine companion of men and a mother, while 40 percent of the vocational education directors and 33 percent of the female vocational faculty agreed.

9. The female vocational faculty and the vocational education directors almost unanimously agreed (99 percent) with the statement that women who want full equality should be prepared to accept equal responsibility.

10. Half of the vocational education directors and 41 percent of the female vocational faculty disagreed with the statement that intellectual achievement of women is viewed as competitively aggressive behavior while 32 percent of the vocational education directors and 42 percent of the female vocational faculty agreed.

11. More female vocational faculty than vocational education directors (28 percent to 26 percent respectively) agreed that women in supervisory positions have difficulty dealing with male subordinates. Half of the vocational education directors and 44 percent of the female vocational faculty disagreed.

12. The great majority of the female vocational faculty (99 percent) and the vocational education directors (98 percent) agreed that a co-educational faculty provides a healthy atmosphere.

13. The majority of the female vocational faculty and the vocational education directors (81 percent and 72 percent respectively) disagreed with the statement that career women play down feminine appearance in order to be taken seriously.

14. The majority of the female vocational faculty (75 percent) and 71 percent of the vocational education directors agreed that women have unique qualities to bring to the classroom that are not present in male faculty.

The results outlined in the former paragraphs provided information related to the dual-role conflict experienced by female vocational faculty members in comprehensive high schools as perceived by themselves and by the vocational education directors. Further examination of the 14 item dual-role conflict subscale is illustrated in Table 5.1 which displays the percentage of female vocational faculty members and vocational education directors in comprehensive high schools who agreed, were undecided or disagreed with each item.

Advancement Possibilities Subscale

An examination of the five item advancement possibilities subscale, which was performed to the female vocational faculty's data and to the vocational education directors' data, revealed the following facts:

1. Most of the female vocational faculty (81 percent) and most of the vocational education directors (67 percent) agreed that the possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair.

2. Most of the female vocational faculty (77 percent) and 80 percent of the vocational education directors agreed that the higher the educational attainment of women the greater the chances of their advancement.

3. The majority of the female vocational faculty and vocational education directors (69 percent and 56 percent respectively) agreed that in their institutions women are not as likely to achieve positions of leadership as are men.

4. The majority of the female vocational faculty and vocational education directors (51 percent and 83 percent respectively) agreed that women successfully compete with men in their institutions.

Table 5.1

An Item Analysis of the Dual-Role Conflict of the Female Vocational Faculty as Perceived by Themselves and by the Vocational Education Directors in Comprehensive High Schools

Item	Percent Agreed Faculty-Directors	Percent Undecided Faculty-Directors	Percent Disagreed Faculty-Directors
1. It is fine for a woman to work if her children are adequately cared for.	88 - 91	6 - 4	6 - 5
2. Women can live in productive harmony with men filling complementary and supplementary roles.	88 - 88	6 - 4	6 - 8
3. A mother's working can be easily accepted by a child.	52 - 38	26 - 28	22 - 34
4. Marriage is an asset for professional women.	44 - 42	33 - 37	23 - 21
5. For professional women, children are an asset.	30 - 29	39 - 42	31 - 29
6. It is possible to be successful at both marriage and a career.	91 - 90	5 - 7	4 - 3
7. Professional women tend to think of employment as a life-time career.	67 - 63	17 - 21	16 - 16
8. A woman's first responsibility is to be a feminine companion of men and a mother.	33 - 40	16 - 21	52 - 39
9. Women who want full equality should be prepared to accept equal responsibility.	99 - 99	0 - 1	1 - 0
10. Intellectual achievement of women is viewed as competitively aggressive behavior.	41 - 32	18 - 18	42 - 50

Table 5.1 (Continued)

Item	Percent Agreed Faculty-Directors	Percent Undecided Faculty-Directors	Percent Disagreed Faculty-Directors
11. Women in supervisory positions have difficulty dealing with males in subordinate positions.	28 - 26	28 - 24	44 - 50
12. A co-educational faculty provides a healthy atmosphere.	99 - 98	1 - 2	0 - 0
13. Career women play down feminine appearance in order to be taken seriously.	10 - 12	9 - 16	81 - 72
14. Women have unique qualities to bring to the classroom that are not present in male faculty.	74 - 71	12 - 14	14 - 15

Some percentage totals do not add to 100 percent because of rounding error.

5. Most of the female vocational faculty (65 percent) and 83 percent of the vocational education directors agreed that in general professional women are on par with professional men in their institutions.

The findings outlined in the preceding paragraphs provided information related to the advancement possibilities that female vocational faculty have in comprehensive high schools as perceived by themselves and by the vocational education directors. Further analysis of the five item advancement possibilities subscale is displayed in Table 5.2.

Table 5.2

An Item Analysis of the Advancement Possibilities of the Female Vocational Faculty as Perceived by Themselves and by the Vocational Education Directors in Comprehensive High Schools

Item	Percent Agreed Faculty-Directors	Percent Undecided Faculty-Directors	Percent Disagreed Faculty-Directors
1. The possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair.	81 - 67	7 - 9	12 - 25
2. The higher the educational attainment of women the greater the chances of their advancement.	77 - 80	13 - 11	11 - 10
3. In this institution women are not as likely to achieve positions of leadership as men.	69 - 57	8 - 7	23 - 36
4. Women successfully compete with men at this institution.	51 - 73	14 - 12	35 - 15
5. In general professional women are on par with professional men at this institution.	64 - 83	10 - 8	26 - 9

Some percentage totals do not add to 100 percent because of rounding error.

This table shows the percentage of female vocational faculty members and vocational education directors in comprehensive high schools who agreed, were undecided or disagreed with each item.

Professional Aspirations Subscale

An analysis of the six item professional aspirations subscale, which was performed to the female vocational faculty's data and to the vocational education director's data, revealed the following facts:

1. An equal percentage of female vocational faculty and vocational education directors (86 percent) agreed that professional women can realistically expect to have a life-long career.

2. The majority of the female vocational faculty and the majority of the vocational education directors (95 percent and 90 percent respectively) agreed that women have as much need to achieve as men.

3. Most of the female vocational faculty (55 percent) and only 25 percent of the vocational education directors agreed that a woman's professional career should be subservient to her husband's. On the other hand, 59 percent of the vocational education directors and only 29 percent of the female vocational faculty disagreed.

4. The same percentage of female vocational faculty and vocational education directors (17 percent) agreed that most women would like to be promoted to an administrative position, while the majority of the female vocational faculty as well as the vocational education directors (53 percent and 52 percent respectively) disagreed.

5. The majority of the female vocational faculty (79 percent) and 63 percent of the vocational education directors agreed that most women would rather be promoted by merit than by seniority.

6. The same percentage of female vocational faculty and vocational education directors (40 percent) agreed that most women would like to

end their educational career as high school teachers. Whereas, a greater number of female vocational faculty than vocational education directors disagreed (42 percent to 38 percent respectively).

The results outlined in the preceding paragraphs provided information related to the professional aspirations that female vocational faculty have in comprehensive high schools as perceived by themselves and by the vocational education directors. Further examination of the six item professional aspirations subscale is illustrated in Table 5.3 which displays the percentage of female vocational faculty members and vocational education directors in comprehensive high schools who agreed, were undecided or disagreed with each item.

In summary, this chapter provided some facts regarding the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members as perceived by themselves and by the vocational education directors in comprehensive high schools.

Some of the highlights pertaining to the perception of the dual-role conflict experienced by the female vocational faculty members are: 1) a greater percentage of vocational education directors than female vocational faculty members agreed that it is fine for a woman to work if her children are adequately cared for; 2) a greater percentage of directors than female faculty agreed with the statement that a woman's first responsibility is to be a feminine companion of men and a mother; 3) a greater percentage of vocational education directors than female vocational faculty members disagreed that intellectual achievement of women is viewed as competitively aggressive behavior; 4) a greater percentage of directors than female faculty disagreed with the statement that women in supervisory positions have difficulty dealing with males

Table 5.3

An Item Analysis of the Professional Aspirations of the Female Vocational Faculty as Perceived by Themselves and by the Vocational Education Directors in Comprehensive High Schools

Item	Percent Agreed Faculty-Directors	Percent Undecided Faculty-Directors	Percent Disagreed Faculty-Directors
1. Professional women can realistically expect to have a life-long career.	86 - 86	8 - 10	7 - 4
2. Women have as much need to achieve as men.	95 - 90	3 - 4	2 - 6
3. A woman's professional career should be subservient to her husband's.	55 - 25	17 - 16	28 - 59
4. Most women would like to be promoted to an administrative position.	17 - 17	30 - 31	53 - 52
5. Most women would rather be promoted by merit rather than by seniority.	79 - 63	15 - 27	6 - 10
6. Most women, in your school, would like to end their educational careers as high school teachers.	40 - 41	18 - 21	42 - 38

Some percentage totals do not add to 100 percent because of rounding error.

in subordinate positions; and 5) more female faculty disagreed than agreed with the statement that for professional women, children are an asset. Finally, it appears that there is almost unanimous consensus between the female vocational faculty members and the vocational education directors that women can fulfill the two roles (at home and as a professional) in harmony with men.

From the perception of the female vocational faculty's advancement possibilities, the following conclusions were drawn: 1) a greater percentage of vocational education directors than female vocational faculty members disagreed with the statement that the possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair; 2) a greater percentage of directors than female faculty agreed that the higher the educational attainment of women the greater the chances of their advancement; and 3) a greater percentage of vocational education directors than female vocational faculty agreed that women successfully compete with men at their institution. Finally, it appears that the vocational education directors are more likely to believe that the female vocational faculty in their schools do not experience discriminatory treatment in advancement possibilities than the female vocational faculty themselves.

In concluding this chapter, the following perceptions of the female vocational faculty members' professional aspirations were found: 1) a greater percentage of female vocational faculty members than vocational education directors believed that a woman's professional career should be subservient to her husband's, 2) a greater percentage of the female vocational faculty than vocational education directors believe that most women would not like to be promoted to an administrative position, and 3) the majority of the female vocational faculty members and vocational education directors believe that most women would rather be promoted by merit rather than by seniority. Finally, the great majority of the female vocational faculty and vocational education directors believe that women have as much need to achieve as men and that professional women can expect to have a life-long career.

Chapter 6

ANALYSIS OF RELATIONSHIPS

This chapter deals with the analysis of the relationships between some selected biographical data items and the three perception subscales (dual-role conflict, advancement possibilities, and professional aspirations) for the female vocational faculty members and the vocational education directors in comprehensive high schools. This chapter also examines the relationship between a selected item in each subscale and the remaining items in that subscale for the female vocational faculty members and the vocational education directors. Specifically, this chapter answers Part II, Questions #3, #4, #5, #6, and #7.

All the statistical information relevant to Questions #3 and #4 was tested for significance at the .05 level. The interrelationships between the 29 variables (four dependent and 25 independent) were computed for the female vocational faculty members and for the vocational education directors.

The zero-order correlations for the four dependent variables (age, years at present institution, salary, and year earned highest degree) and the 25 independent variables for the female vocational faculty members were computed. The intercorrelations among the dependent variables ranged from -.73 to .61 and the intercorrelations among the independent variables ranged from -.45 to .57; a total of 152 significant relationships were found.

The zero-order correlations for the four dependent variables (age, years at present institution, salary, and year earned highest degree) and the 25 independent variables for the vocational education directors were also computed. The intercorrelations among the dependent variables ranged from -.49 to .46 and the intercorrelations among the independent variables ranged from -.43 to .58. A total of 167 significant relationships were found.

Question #3. What are the relationships between the age of the female vocational teachers, their number of years at their present institution, their salary, and the year they received their highest degree and their perception of their dual-role, their advancement possibilities, and their professional aspirations?

Multiple regression analyses were conducted to determine the amount of unique information available from the dual-role conflict subscale (14 independent variables), the advancement possibilities subscale (five independent variables), and the professional aspirations subscale (six independent variables), to predict the four dependent variables (age, years at present institution, salary, and year earned highest degree).

The analyses of relationships between each of the four dependent variables and the three subscales are presented in sections I through IV for the female vocational faculty members.

I. Relationships Between the Dependent Variable Age of the Female Vocational Faculty Members and their Perception of their Dual-Role Conflict, Advancement Possibilities, and Professional Aspirations

In the following paragraphs, the relationships between the age of the female vocational faculty members and their perception of their dual-role conflict, advancement possibilities, and professional aspirations are discussed.

A. Relationship Between Age and the Dual-Role Conflict Subscale

An inspection of Table 6.1 revealed that only three out of the 14 independent variables in the dual-role conflict subscale were related significantly to the dependent variable age. The three independent variables were: 1) "marriage is an asset for professional women"; 2) "for professional women, children are an asset"; and 3) "it is possible to be successful at both marriage and a career." A multiple regression analysis was conducted to determine the amount of predictive information available from the dual-role subscale.

The significance of the total relationship was tested by dividing the mean squares regression (MSR) by the mean squares error (MSE) to obtain the overall F-ratio with K and N-k-1 degrees of freedom. In this test, the null hypothesis that all partial regression coefficients are equal to zero was tested. The overall F-ratio for the dual-role conflict full model subscale was found to be 3.38 which is significant at the .05 level.

Each partial regression coefficient represents the portion of the independent variable that is uniquely associated with one unit of change in the dependent variable excluding the effects of the remaining k-1 independent variables.

A student "t" value of each variable was obtained by dividing its partial regression coefficient by its standard error. This student "t" value was then compared to a tabled value of student "t's" with one degree of freedom and N-k-1

Table 6.1

Full Model Regression Analysis Between the Dependent Variable Age of the Female Vocational Faculty in Comprehensive High Schools and the Fourteen Independent Variables in the Dual-Role Conflict Subscale (N=448)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
9. For professional women, children are an asset.	.18	.07	2.51*
19. Intellectual achievement of women is viewed as competitively aggressive behavior.	-.17	.05	3.14*
23. Career women play down feminine appearance in order to be taken seriously.	.15	.06	2.50*
Intercept	29.76	7.31	

Standard Error of Estimate = 11.56

Multiple Correlation (R) = .31

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .07

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 3.38*

*Significant at the .05 level.

degrees of freedom. This test was conducted to ascertain the significance of each partial regression coefficient. Using this procedure, only the following three independent variables were found to be related significantly to the dependent variable age: 1) "for professional women, children are an asset"; 2) "intellectual achievement of women is viewed as competitively aggressive"; and 3) "career women play down feminine appearance in order to be taken seriously."

A restricted model analysis was calculated to determine which variables possessed the most information useful for prediction. Multiple regressions were conducted each time omitting the independent variable that made the least contribution to the prediction. These eliminations continued until the regression coefficients of all the remaining independent variables were significantly different from zero. Table 6.2 provides the results of the dual-role conflict restricted model analysis.

It was apparent that the three independent variables in the dual-role conflict restricted model possessed most of the unique information for predicting the dependent variable age. Consequently, it was concluded that those female vocational faculty members who are older, most often agreed that: 1) "for professional women, children are an asset"; and 2) "career women play down feminine appearance in order to be taken seriously." But most often, they disagreed with the statement that "intellectual achievement of women is viewed as competitively aggressive behavior."

B. Relationship Between Age and the Advancement Possibilities Subscale

None of the five independent variables in the advancement possibilities subscale were related significantly to the dependent variable age. Therefore, no further analysis of the data was performed and it was concluded that there is no

Table 6.2

Restricted Model Regression Analysis Between the Dependent Variable Age of the Female Vocational Faculty in Comprehensive High Schools and the Three Independent Variables from the Dual-Role Conflict Subscale (N=448)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
9. For professional women, children are an asset.	.25	.06	4.51*
19. Intellectual achievement of women is viewed as competitively aggressive behavior.	-.17	.05	3.18*
23. Career women play down feminine appearance in order to be taken seriously.	.14	.06	2.44*
Intercept	31.37	2.63	

Standard Error of Estimate = 11.53

Multiple Correlation (R) = .28

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .07

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 12.81*

*Significant at the .05 level

significant relationship between the age of the female vocational faculty members and their perception of their advancement possibilities.

C. Relationship Between Age and the Professional Aspirations Subscale

None of the independent variables in the professional aspirations subscale were related significantly to the dependent variable age. Therefore, no further analysis of the data was performed and it was concluded that there is no significant relationship between the age of the female vocational faculty members and their perception of their professional aspirations.

II. Relationships Between the Dependent Variable Years at Present Institution for the Female Vocational Faculty Members and their Perception of their Dual-Role Conflict, Advancement Possibilities, and Professional Aspirations

In the following paragraphs the relationships between the number of years that the female vocational faculty members have spent at their present institution and their perception of their dual-role conflict, advancement possibilities, and professional aspirations are discussed.

A. Relationship Between Years at Present Institution and the Dual-Role Conflict Subscale

Five out of the 14 independent variables in the dual-role conflict subscale were related significantly to the dependent variable years at present institution. The five independent variables were: 1) "a mother's working can be easily accepted by a child"; 2) "marriage is an asset for professional women"; 3) "for professional women, children are an asset"; 4) "professional women tend to think of employment as a lifetime career"; and 5) "intellectual achievement of women is viewed as competitively aggressive behavior." A multiple regression analysis was conducted to determine the amount of predictive information available from the dual-role conflict subscale. It was found that the 14 independent variables accounted for less than five percent of the total variance of the dependent variable years at present institution.

Therefore, the full and restricted model analyses were not reported. It was concluded that there is no significant relationship between the number of years that the female vocational faculty members have worked at their present institution and their perception of their dual-role conflict.

B. Relationship Between Years at Present Institution and the Advancement Possibilities Subscale

None of the five independent variables in the advancement possibilities subscale were related significantly to the dependent variable years at present institution. Therefore, no further analysis of the data was necessary and it was concluded that there is no significant relationship between the number of years that the female vocational faculty members have worked in their present institution and their perception of their advancement possibilities.

C. Relationship Between Years at Present Institution and the Professional Aspirations Subscale

Only the independent variable, "professional women can realistically expect to have a lifelong career" from the professional aspirations subscale, was related significantly to the dependent variable years at present institution. A multiple regression analysis was conducted to determine the amount of predictive information available from the professional aspirations subscale. It was found that the six independent variables accounted for less than five percent of the total variance of the dependent variable years at present institution. Therefore, the full and restricted model analyses were not reported. It was concluded that there is no significant relationship between the number of years that the female vocational faculty members have worked at their present institution and their perception of their professional aspirations.

III. Relationships Between the Dependent Variable Salary of the Female Vocational Faculty Members and their Perception of their Dual-Role Conflict, Advancement Possibilities, and Professional Aspirations

In the following paragraphs the relationships between the salary of the female vocational faculty members and their perception of their dual-role conflict, advancement possibilities, and professional aspirations are discussed.

A. Relationship Between Salary and the Dual-Role Conflict Subscale

Four out of the 14 independent variables in the dual-role conflict subscale were related significantly to the dependent variable salary. The four independent variables were: 1) "a mother's working can be easily accepted by a child"; 2) "professional women tend to think of employment as a lifetime career"; 3) "a woman's professional career should be subservient to her husband's"; and 4) "a co-educational faculty provides a healthy atmosphere." A multiple regression analysis was conducted to determine the amount of predictive information from the dual-role conflict subscale. It was found that the 14 independent variables accounted for less than five percent of the total variance of the dependent variable salary. Therefore, the full and restricted model analyses were not reported. It was concluded that there is no significant relationship between the salary of the female vocational faculty members and their perception of their dual-role conflict.

B. Relationship Between Salary and the Advancement Possibilities Subscale

None of the five independent variables in the advancement possibilities subscale were related significantly to the dependent variable salary. Therefore, no further analysis of the data was necessary and it was concluded that there is no significant relationship between the salary of the female vocational faculty members and their perception of their advancement possibilities.

C. Relationship Between Salary and the Professional Aspirations Subscale

None of the six independent variables in the professional aspirations subscale were related significantly to the dependent variable salary. Therefore, no further analysis of the data was required and it was concluded that there is no significant relationship between the salary of the female vocational faculty members and their perception of their professional aspirations.

IV. Relationships Between the Dependent Variable Year Earned Highest Degree for the Female Vocational Faculty Members and their Perception of their Dual-Role Conflict, Advancement Possibilities, and Professional Aspirations

In the following paragraphs, the relationships between the year in which the female vocational faculty members earned their highest degree and their perception of their dual-role conflict, advancement possibilities, and professional aspirations are discussed.

A. Relationship Between Year Earned Highest Degree and the Dual-Role Conflict Subscale

Three out of the 14 independent variables in the dual-role conflict subscale were related significantly to the dependent variable year earned highest degree. The three independent variables were: 1) "marriage is an asset for professional women"; 2) "for professional women, children are an asset"; and 3) "intellectual achievement of women is viewed as competitively aggressive behavior." A multiple regression analysis was conducted to determine the amount of predictive information available from the dual-role conflict subscale. The results of the full model analysis are shown in Table 6.3. The student "t's" for the following three independent variables were found to be significant: 1) "women can live in productive harmony with men filling complementary and supplementary roles"; 2) "for professional women, children are an asset"; and 3) "intellectual achievement of women is viewed as competitively aggressive behavior."

A restricted model analysis was calculated to determine which variables possessed the most information useful for prediction. Table 6.4 displays the results of the restricted model. The standard error of estimate was 10.41, the total multiple correlation was .26, the coefficient of determination

Table 6.3

Full Model Regression Analysis Between The Dependent Variable Year Earned Highest Degree for the Female Vocational Faculty in Comprehensive High Schools and the Fourteen Independent Variables in the Dual-Role Conflict Subscale (N=448)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
3. Women can live in productive harmony with men filling complementary and supplementary roles.	.15	.06	2.49*
9. For professional women, children are an asset.	.13	.06	2.06*
19. Intellectual achievement of women is viewed as competitively aggressive behavior.	.14	.05	2.86*
Intercept	66.78	6.59	

Standard Error of Estimate = 10.43

Multiple Correlation (R) = .30

Coefficient of Determination Adjusted for Degrees of Fredom $(\overline{R}^2)$ = .06

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 2.95*

*Significant at the .05 level

Table 6.4

Restricted Model Regression Analysis Between the Dependent Variable Year Earned Highest Degree for the Female Vocational Faculty in Comprehensive High Schools and the Three Independent Variables from the Dual-Role Conflict Subscale (N=448)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
3. Women can live in productive harmony with men filling complementary and supplementary roles.	.12	.06	2.14*
9. For professional women, children are an asset.	-.21	.05	4.11*
19. Intellectual achievement of women is viewed as competitively aggressive behavior.	.14	.05	2.91*
Intercept	59.61	3.37	

Standard Error of Estimate = 10.41

Multiple Correlation (R) = .26

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .06

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 10.56*

*Significant at the .05 level

adjusted for degrees of freedom was .06, and the overall F-ratio was 10.56 which is significant at the .05 level.

It was apparent that the three independent variables in the restricted model possessed most of the unique information for predicting the dependent variable year earned highest degree. Consequently, it was concluded that those female vocational faculty members who most recently earned their highest degree, most often agreed that: 1) "women can live in productive harmony with men filling complementary and supplementary roles"; and 2) "intellectual achievement of women is viewed as competitively aggressive behavior." But most often, they disagreed with the statement that, "for professional women, children are an asset."

B. Relationship Between Year Earned Highest Degree and the Advancement Possibilities Subscale

None of the five independent variables in the advancement possibilities subscale were related significantly to the dependent variable year earned highest degree. Therefore, no further analysis of the data was necessary and it was concluded that there is no significant relationship between the year in which the female vocational faculty members earned their highest degree and their perception of their advancement possibilities.

C. Relationship Between Year Earned Highest Degree and the Professional Aspirations Subscale

Two out of the six independent variables in the professional aspirations subscale were related significantly to the dependent variable year earned highest degree. The two variables were: 1) "a woman's professional career should be subservient to her husband's," and 2) "most women would like to be promoted to an administrative position." A multiple regression analysis was conducted to determine the amount of predictive information from the professional aspirations subscale. It was found that the six independent variables accounted for less than five percent of the total variance of the dependent variable year earned highest degree. Therefore, the full and restricted model analyses were not reported. It was concluded that there is no significant relationship between the year in which the female faculty members earned their highest degrees and their perception of their professional aspirations.

In summarizing the findings related to Question #3, it can be stated that:

1. Those female vocational faculty members who are older, most often agreed that, "for professional women, children are an asset," and that, "career women play down feminine appearance in order to be taken seriously." But most often, they disagreed with the statement that, "intellectual achievement of women is viewed as competitively aggressive behavior."

2. There is no significant relationship between the age of the female vocational faculty members and their perception of their advancement possibilities and their professional aspirations.

3. There is no significant relationship between the number of years that the female vocational faculty members have worked in their present institution and their perception of their dual-role conflict, their advancement possibilities, and their professional aspirations.

4. There is no significant relationship between the salary of the female vocational faculty members and their perception of their dual-role conflict, their advancement possibilities, and their professional aspirations.

5. Those female vocational faculty members who most recently earned their highest degrees, most often agreed that, "women can live in productive harmony with men filling complementary and supplementary roles," and that, "intellectual achievement of women is viewed as competitively aggressive behavior." But most often they disagreed with the statement that, "for professional women, children are an asset."

6. There is no significant relationship between the year in which the female vocational faculty members earned their highest degrees and their perception of their advancement possibilities, and their professional aspirations.

Question #4. What are the relationships between the age of vocational education directors, their number of years at their present institution, their salary, and the year they received their highest degree and their perception of the dual-role, advancement possibilities, and professional aspirations of female vocational faculty members?

Multiple regression analyses were conducted to determine the amount of unique information available from the dual-role conflict subscale (14 independent variables), the advancement possibilities subscale (five independent variables), and the professional aspirations subscale (six independent variables) to predict the four dependent variables (age, years at present institution, salary, and year earned highest degree).

The analyses of relationships between each of the four dependent variables and the three subscales are presented in sections V through VIII for the vocational education directors.

V. Relationships Between the Dependent Variable Age of the Vocational Education Directors and their Perception of the Dual-Role Conflict, Advancement Possibilities, and Professional Aspirations of the Female Vocational Faculty Members

In the following paragraphs, the relationships between the age of the vocational education directors and their perception of the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members are discussed.

A. Relationship Between Age and the Dual-Role Conflict Subscale

Three out of the 14 independent variables in the dual-role conflict subscale were related significantly to the dependent variable age. The three independent variables were: 1) "marriage is an asset for professional women," 2) "it is possible to be successful at both marriage and a career," and 3) "women have unique qualities to bring to the classroom that are not present in male faculty." A multiple regression analysis was conducted to determine the amount of predictive information available from the dual-role conflict subscale. The significant results of the full model analysis are illustrated in Table 6.5. It was found that the 14 independent variables accounted for less than six percent of the total variance of the dependent variable age. Therefore, the restricted model analysis was not reported. It was concluded that there is no significant relationship between the age of the vocational education directors and their perception of the dual-role conflict of the female vocational faculty members.

B. Relationship Between Age and the Advancement Possibilities Subscale

None of the five independent variables in the advancement possibilities subscale were related significantly to the dependent variable age. Therefore, no further analysis of the data was performed and it was concluded that there is no significant relationship between the age of the vocational education directors and their perception of the advancement possibilities of the female vocational faculty members.

C. Relationship Between Age and the Professional Aspirations Subscale

None of the six independent variables in the professional aspirations subscale were related significantly to the dependent variable age. Therefore, no further analysis of the data was performed and it was concluded that there is

Table 6.5

Full Model Regression Analysis Between the Dependent Variable Age of the Vocational Education Directors in Comprehensive High Schools and the Fourteen Independent Variables in the Dual-Role Conflict Subscale (N=301)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
7. Marriage is an asset for professional women.	.23	.09	2.44*
25. Women have unique qualities to bring to the classroom that are not present in male faculty.	.16	.07	2.18*
Intercept	35.67	9.44	

Standard Error of Estimate = 12.10

Multiple Correlation (R) = .32

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .05

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 2.29*

*Significant at the .05 level

no significant relationship between the age of the vocational education directors and their perception of the professional aspirations of the female vocational faculty members.

VI. Relationships Between the Dependent Variable Years at Present Institution for the Vocational Education Directors and their Perception of the Female Vocational Faculty Members' Dual-Role Conflict, Advancement Possibilities, and Professional Aspirations

In the following paragraphs the relationships between the number of years that the vocational education directors have worked at their present institution and their perception of the female vocational faculty members' dual-role conflict, advancement possibilities, and professional aspirations are discussed.

A. Relationship Between Years at Present Institution and the Dual-Role Conflict Subscale

Only the independent variable, "for professional women, children are an asset" from the dual-role conflict subscale was related significantly to the dependent variable years at present institution. A multiple regression analysis was conducted to determine the amount of predictive information from the dual-role conflict subscale. It was found that the 14 independent variables accounted for less than five percent of the total variance of the dependent variable years at present institution. Therefore, the full and restricted model analyses were not reported. It was concluded that there is no significant relationship between the number of years that the vocational education directors have worked at their present institution and their perception of the dual-role conflict of the female vocational faculty members.

B. Relationship Between Years at Present Institution and the Advancement Possibilities Subscale

None of the five independent variables in the advancement possibilities subscale were related significantly to the dependent variable year at present institution. Therefore, no further analysis of the data was necessary and it was concluded that there is no significant relationship between the number of years that the vocational education directors have worked in their present institution and their perception of the advancement possibilities of the female vocational faculty members.

C. Relationship Between Years at Present Institution and the Professional Aspirations Subscale

None of the six independent variables in the professional aspirations subscale were related significantly to the dependent variable year at present institution. Therefore, no further analysis of the data was necessary and it was concluded that there is no significant relationship between the number of years that the vocational education directors have worked in their present institution and their perception of the professional aspirations of the female vocational faculty members.

VII. Relationships Between the Dependent Variable Salary of the Vocational Education Directors and their Perception of the Female Vocational Faculty Members' Dual-Role Conflict, Advancement Possibilities, and Professional Aspirations

In the following paragraphs the relationships between the salary of the vocational education directors and their perception of the female vocational faculty members' dual-role conflict, advancement possibilities, and professional aspirations are discussed.

A. Relationship Between Salary and the Dual-Role Conflict Subscale

Two out of the 14 independent variables in the dual-role conflict subscale were related significantly to the dependent variables salary. The two independent variables were: 1) "it is possible to be successful at both marriage and a career," and 2) "intellectual achievement of women is viewed as competitively aggressive behavior." A multiple regression analysis was conducted to determine the amount of predictive information from the dual-role conflict subscale. The significant results of the full model analysis are shown in Table 6.6. The student "t's" for only the following two independent variables were found to be significant: 1) "it is possible to be successful at both marriage and a career," and 2) "a woman's first responsibility is to be a feminine companion of men and a mother." A restricted model analysis was calculated to determine which variables possessed the most information useful for prediction. Table 6.7 displays the results of the restricted model. The standard error of estimate was 6324.85, the total multiple correlation was 27, the coefficient of determination adjusted for degrees of freedom was .06, and the overall F-ratio was 7.74 which is significant at the .05 level.

It was apparent that the three independent variables in the restricted model possessed most of the unique information for predicting the dependent variable salary. Consequently, it was concluded that those vocational education directors who earn the highest salaries most often disagreed with the following statements: 1) "it is possible to be successful at both marriage and a career," 2) "a woman's

Table 6.6

Full Model Regression Analysis Between the Dependent Variable Salary of the Vocational Education Directors in Comprehensive High Schools and the Fourteen Independent Variables in the Dual-Role Conflict Subscale (N=301)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
11. It is possible to be successful at both marriage and a career.	-228.81	59.58	3.84*
15. A woman's first responsibility is to be a feminine companion of men and a mother.	-73.85	34.70	2.13*
Intercept	25298.04	4946.01	

Standard Error of Estimate = 6342.17

Multiple Correlation (R) = .32

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .06

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 2.50*

*Significant at the .05 level

first responsibility is to be a feminine companion of men and a mother," and 3) "intellectual achievement of women is viewed as competitively aggressive behavior."

B. Relationship Between Salary and the Advancement Possibilities Subscale

Only two out of the five independent variables in the advancement possibilities subscale were related significantly to the dependent variable salary. The two variables were: 1) "the possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair," and 2) "in this institution women are not as likely to achieve

Table 6.7

Restricted Model Regression Analysis Between the Dependent Variable Salary of the Vocational Education Directors in Comprehensive High Schools and the Three Independent Variables from the Dual-Role Conflict Subscale (N=301)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
11. It is possible to be successful at both marriage and a career.	-188.55	50.67	3.72*
15. A woman's first responsibility is to be a feminine companion of men and a mother.	-64.40	32.46	1.98*
19. Intellectual achievement of women is viewed as competitively aggressive behavior.	-91.23	35.91	2.54*
Intercept	26312.46	2667.70	

Standard Error of Estimate = 6324.85

Multiple Correlation (R) = .27

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .06

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 7.74*

*Significant at the .05 level.

positions of leadership as men." A multiple regression analysis was conducted to determine the amount of predictive information available from the advancement possibilities subscale. It was found that the five independent variables accounted for less than five percent of the total variance of the dependent variable salary. Therefore, the full and restricted model analyses were not reported. It was concluded that there is no significant relationship between the salary of the vocational education directors and their perception of the advancement possibilities of the female vocational faculty members.

C. Relationship Between Salary and the Professional Aspirations Subscale

None of the six independent variables in the professional aspirations subscale were related significantly to the dependent variable salary. Therefore, no further analysis of the data was necessary and it was concluded that there is no significant relationship between the salary of the vocational education directors and their perception of the professional aspirations of the female vocational faculty members.

VIII. Relationships Between the Dependent Variable Year Earned Highest Degree for the Vocational Education Directors and their Perception of the Female Vocational Faculty Members' Dual-Role Conflict, Advancement Possibilities and Professional Aspirations

In the following paragraphs, the relationships between the year in which the vocational education directors earned their highest degree and their perception of the female vocational faculty members' dual-role conflict, advancement possibilities, and professional aspirations are discussed.

A. Relationship Between Year Earned Highest Degree and the Dual-Role Conflict Subscale

Five out of the 14 independent variables in the dual-role conflict subscale were related significantly to the dependent variable year earned highest degree. The five independent variables were: 1) "women can live in productive harmony with men filling complementary and supplementary roles," 2) "marriage is an asset for professional women," 3) "it is possible to be successful at both marriage and a career," 4) "professional women tend to think of employment as a lifetime career," and 5) "career women play down feminine appearance in order to be taken seriously." A multiple regression analysis was conducted to determine the amount of predictive information from the dual-role conflict subscale.

The results of the full model analysis are shown in Table 6.8. The student "t" values for only the following two independent variables were found to be significant: 1) "for professional women, children are an asset," and 2) "it is possible to be successful at both marriage and a career."

A restricted model analysis was calculated to determine which variables possessed the most information useful for prediction. Table 6.9 displays the results of the restricted model. The standard error of estimate was 8.81, the total multiple correlation was .24, the coefficient of determination adjusted for degrees of freedom was .05, and the overall F-ratio was 9.32 which is significant at the .05 level.

It was apparent that the two independent variables in the dual-role conflict restricted model possessed most of the unique information useful for predicting the dependent variable years at present institution. Consequently, it was concluded that those vocational education directors who most recently earned their highest degree, most often agreed that,

Table 6.8

Full Model Regression Analysis Between the Dependent Variable Year Earned Highest Degree for the Vocational Education Directors in Comprehensive High Schools and the Fourteen Independent Variables in the Dual-Role Conflict Subscale (N=301)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
9. For professional women, children are an asset.	-.14	.07	2.01*
11. It is possible to be successful at both marriage and a career.	.24	.08	2.89*
13. Professional women tend to think of employment as a life-time career.	-.15	.06	2.45*
Intercept	60.32	6.80	

Standard Error of Estimate = 8.72

Multiple Correlation (R) = .34

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R^2}$) = .07

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 2.67*

*Significant at the .05 level

"for professional women, children are an asset," but most often, they disagreed with the statement, "it is possible to be successful at both marriage and a career."

B. Relationship Between Year Earned Highest Degree and the Advancement Possibilities Subscale

Only the independent variable, "the possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair" from the advancement possibilities subscale was related significantly to the dependent variable year earned highest degree. A multiple regression analysis was

Table 6.9

Restricted Model Regression Analysis Between the Dependent Variable Year Earned Highest Degree for the Vocational Education Directors in Comprehensive High Schools and the Two Independent Variables from the Dual-Role Conflict Subscale (N=301)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
9. For professional women, children are an asset.	-.19	.06	3.40*
11. It is possible to be successful at both marriage and a career.	.26	.07	3.54*
Intercept	58.21	3.08	

Standard Error of Estimate = 8.81

Multiple Correlation (R) = .24

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .06

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 9.32*

*Significant at the .05 level

conducted to determine the amount of predictive information available from the advancement possibilities subscale. It was found that the five independent variables accounted for less than five percent of the total variance of the dependent variable year earned highest degree. Therefore, the full and restricted model analyses were not reported. It was concluded that there is no significant relationship between the year in which the vocational education directors earned their highest degree and their perception of the advancement possibilities of the female vocational faculty members.

C. Relationship Between Year Earned Highest Degree and the Professional Aspirations Subscale

None of the six independent variables in the professional aspirations subscale were found to be related significantly to the dependent variable year earned highest degree. Therefore, no further analysis of the data was necessary and it was concluded that there is no significant relationship between the year in which the vocational education directors earned their highest degree and their perception of the professional aspirations of the female vocational faculty members.

In summarizing the findings related to Question #4, it can be stated that:

1. There is no significant relationship between the age of the vocational education directors or the number of years that they have worked at their present institution and their perception of the female vocational faculty members' dual-role conflict, advancement possibilities, and professional aspirations.

2. Those vocational education directors who earn the highest salaries most often disagreed with the following statements: a) "it is possible to be successful at both marriage and a career," b) "a woman's first responsibility is to be a feminine companion of men and a mother," and c) "intellectual achievement of women is viewed as competitively aggressive behavior."

3. There is no significant relationship between the salary of the vocational education directors and their perception of the female vocational faculty members' advancement possibilities and professional aspirations.

4. Those vocational education directors who most recently earned their highest degree, most often agreed that, "for professional women, children are an asset"; but most often, they disagreed with the statement that, "it is possible to be successful at both marriage and a career."

5. There is no significant relationship between the year in which the vocational education directors earned their highest degree and their perception of the female vocational faculty members' advancement possibilities and professional aspirations.

All the statistical information relevant to Question #5, #6, and #7 was tested for significance at the .05 level. The interrelationships between the 25 variables (three dependent and 22 independent) for the female vocational faculty members and for the vocational education directors were computed.

The zero-order correlations among the three dependent variables (1. "marriage is an asset for professional women" from the dual-role conflict subscale, 2. "women successfully compete with men at this institution" from the advancement possibilities subscale, and 3. "women have as much need to achieve as men" from the professional aspirations subscale) and the 22 independent variables for the female vocational faculty members and vocational education directors were computed. The intercorrelations among the independent and dependent variables for the female vocational faculty members and vocational education directors were found to fluctuate from -.46 to .58 and from -.43 to .57 respectively. All correlation coefficients that have an absolute value equal or greater than .10 and .11 respectively, are significant at the .05 level, and 138 significant relationships were identified.

Question #5. What is the relationship between the item "marriage is an asset for professional women," and the remaining items in the dual-role conflict subscale for the female vocational faculty members and the vocational education directors in comprehensive high schools?

Multiple regression analyses were conducted to determine the amount of predictive information available from the dual-role conflict subscale (13 independent variables) and the selected item, "marriage is an asset for professional women" for the female vocational faculty members and vocational education directors.

The analyses of relationships between the selected item and its respective subscale is presented in section IX.

IX. Relationships Between the Item "Marriage is an Asset for Professional Women" and the remaining Items in the Dual-Role Conflict Subscale for both the Female Vocational Faculty Members and the Vocational Education Directors in Comprehensive High Schools

In the following paragraphs, the relationships between the selected item and the remaining items in the dual-role conflict subscale for both the female vocational faculty members and the vocational education directors are discussed.

A. Relationship Between the Selected Item and the Dual-Role Conflict Subscale for the Female Vocational Faculty Members

Six out of the 13 independent variables in the dual-role conflict subscale were related significantly to the dependent variable "marriage is an asset for professional women." The six independent variables were: 1) "it is fine for a woman to work if her children are adequately cared for," 2) "a mother's working can be easily accepted by a child," 3) "for professional women, children are an asset," 4) "it is possible to be successful at both marriage and a career," 5) "a co-educational faculty provides a healthy atmosphere," and 6) "women have unique qualities to bring to the classroom that are not present in male faculty." A multiple regression analysis was conducted to determine the amount of predictive information available from the dual-role conflict subscale. The results of the full model analysis are illustrated in Table 6.10. The student "t's" for only the following two independent variables were found to be significant: 1) "for professional women, children are an asset," and 2) "it is possible to be successful at both marriage and a career."

A restricted model analysis was calculated to determine which variables possessed the most information useful for prediction. Table 6.11 displays the results of the restricted model. The standard error of estimate was .79, the total multiple correlation was .58, the coefficient of determination adjusted for degrees of freedom was .33, and the overall F-ratio was 125.71 which is significant at the .05 level.

It was apparent that the two independent variables in the restricted model possessed most of the information for predicting the dependent variable. Consequently, it was concluded that those female vocational faculty members who most

Table 6.10

Full Model Regression Analysis Between the Dependent Variable "Marriage is an Asset for Professional Women" for the Female Vocational Faculty in Comprehensive High Schools and the Thirteen Independent Variables in the Dual-Role Conflict Subscale (N=501)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
9. For professional women, children are an asset.	.48	.04	11.97*
11. It is possible to be successful at both marriage and a career.	.14	.06	2.41*
Intercept	.53	.47	

Standard Error of Estimate = .79

Multiple Correlation (R) = .59

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .33

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 19.71

*Significant at the .05 level

strongly agreed that, "marriage is an asset for professional women," also most strongly agreed that, "for professional women, children are an asset," and that, "it is possible to be successful at both marriage and a career."

B. Relationship Between the Selected Item and the Dual-Role Conflict Subscale for the Vocational Education Directors

Seven out of the 13 independent variables from the dual-role conflict subscale were related significantly to the dependent variable, "marriage is an asset for professional women." The seven independent variables were: 1) "it is fine for a woman to work if her children are adequately

Table 6.11

Restricted Model Regression Analysis Between the Department Variable "Marriage is an Asset for Professional Women" for the Female Vocational Faculty in Comprehensive High Schools and the Two Independent Variables from the Dual-Role Conflict Subscale (N=501)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
9. For professional women, children are an asset.	.51	.04	13.85*
11. It is possible to be successful at both marriage and a career.	.17	.05	3.43*
Intercept	1.00	.22	

Standard Error of Estimate = .79

Multiple Correlation (R) = .58

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R^2}$) = .33

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 125.71*

*Significant at the .05 level

cared for"; 2) "women can live in productive harmony with men filling complementary and supplementary roles"; 3) "a mother's working can be easily accepted by a child"; 4) "for professional women, children are an asset"; 5) "it is possible to be successful at both marriage and a career"; 6) "professional women tend to think of employment as a lifetime career"; and 7) "women have unique qualities to bring to the classroom that are not present in male faculty." A multiple regression analysis was concluded to determine the amount of predictive information available from the dual-role conflict subscale. The results of the full model analysis are illustrated in Table 6.12. The student "t's" for only the following two independent variables were found to be significant: 1) "for professional women, children are an asset," and 2) "professional women tend to think of employment as a lifetime career."

A restricted model analysis was calculated to determine which variable possessed the most information useful for prediction. Table 6.13 displays the results of the restricted model. The standard error of estimate was .76, the total multiple correlation was .58, the coefficient of determination adjusted for degrees of freedom was .34, and the overall F-ratio was 80.63 which is significant at the .05 level.

It was apparent that the two independent variables in the restricted model possessed most of the information useful for predicting the dependent variable. Consequently, it was concluded that those vocational education directors who most strongly agreed that, "marriage is an asset for professional women," also most strongly agreed that, "for professional women," children are an asset" and that, "professional women tend to think of employment as a lifetime career."

In summarizing the findings related to Question #5, it can be stated that:

1. Those female vocational faculty members who most strongly agreed that, "marriage is an asset for professional women," also most

Table 6.12

Full Model Regression Analysis Between the Dependent Variable "Marriage is an Asset for Professional Women" for the Vocational Education Directors in Comprehensive High Schools and the Thirteen Independent Variables in the Dual-Role Conflict Subscale (N=314)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
9. For professional women, children are an asset.	.52	.05	10.28*
11. It is possible to be successful at both marriage and a career.	.14	.07	2.08*
Intercept	.88	.59	

Standard Error of Estimate = .77

Multiple Correlation (R) = .60

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R^2}$) = .3[illegible]

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 12.79*

*Significant at the .05 level

strongly agreed that, "for professional women, children are an asset," and that, "it is possible to be successful at both marriage and a career."

2. Those vocational education directors who most strongly agreed that, "marriage is an asset for professional women," also most strongly agreed that, "for professional women, children are an asset" and that, "professional women tend to think of employment as a lifetime career."

Table 6.13

Restricted Model Regression Analysis Between the Dependent Variable "Marriage is an Asset for Professional Women" for the Vocational Education Directors in Comprehensive High Schools and the Two Independent Variables from the Dual-Role Conflict Subscale (N=314)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
9. For professional women, children are an asset.	.52	.05	11.00*
13. Professional women tend to think of employment as a lifetime career.	.17	.06	2.75*
Intercept	1.02	.26	

Standard Error of Estimate = .76

Multiple Correlation (R) = .58

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .34

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 80.63*

*Significant at the .05 level

Question #6. What is the relationship between the item "women successfully compete with men at this institution," and the remaining items in the advancement possibilities subscale for both the female vocational faculty members and the vocational education directors in comprehensive high schools?

Multiple regression analyses were conducted to determine the amount of predictive information available from the advancement possibilities subscale (four independent variables) and the selected item, "women successfully compete with men at this institution," for the female vocational faculty members and vocational education directors.

The analyses of relationships between the selected item and its respective subscale is presented in section X.

X. Relationships Between the Item "Women Successfully Compete with Men at this Institution," and the Remaining Items in the Advancement Possibilities Subscale for both the Female Vocational Faculty Members and the Vocational Education Directors in Comprehensive High Schools

In the following paragraphs, the relationships between the selected item and the remaining items in the advancement possibilities subscale for both the female vocational faculty members and the vocational education directors are discussed.

A. Relationship Between the Selected Item and the Advancement Possibilities Subscale for the Female Vocational Faculty Members

All of the four independent variables in the advancement possibilities subscale were related significantly to the dependent variable "women successfully compete with men at this institution." The four independent variables were: 1) "the possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair," 2) "the higher the educational attainment of women the greater the chances of their advancement," 3) "in this institution women are not as likely to achieve positions of leadership as men," and 4) "in general professional women are on par with professional men at this institution." A multiple regression analysis was conducted to determine the amount of predictive information available from the advancement possibilities subscale. The results of the full model analysis are illustrated in Table 6.14. The student "t's" for only the following three independent variables were found to be significant: 1) "the

Table 6.14

Full Model Regression Analysis Between the Dependent Variable "Women Successfully Compete with Men at this Institution" for the Female Vocational Faculty in Comprehensive High Schools and the Four Independent Variables in the Advancement Possibilities Subscale (N=501)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
6. The higher the educational attainment of women the greater the chances of their advancement.	.10	.04	2.59*
10. In this institution women are not as likely to achieve positions of leadership as men.	-.28	.04	7.75*
20. In general professional women are on par with professional men at this institution.	.46	.04	12.47*
Intercept	2.41	.30	

Standard Error of Estimate = .82

Multiple Correlation (R) = .65

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .41

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 89.41*

*Significant at the .05 level

higher the educational attainment of women the greater the chances of their advancement," 2) "in this institution women are not as likely to achieve positions of leadership as men," and 3) "in general professional women are on par with professional men at this institution."

A restricted model analysis was calculated to determine which variables possessed the most information useful for prediction. Table 6.15 displays the results of the restricted model. The standard error of estimate was .82, the total multiple correlation was .65, the coefficient of determination adjusted for degrees of freedom was .41, and the overall F-ratio was 118.46 which is significant at the .05 level.

It was apparent that the three independent variables in the restricted model possessed most of the information for predicting the dependent variable. Consequently, it was concluded that those female vocational faculty members who most strongly agreed that, "women successfully compete with men at this institution," also most strongly agreed that, "the higher the educational attainment of women the greater the chances of their advancement," and that, "in general professional women are on par with professional men at this institution." But they most strongly disagreed with the statement, "in this institution women are not as likely to achieve positions of leadership as men."

B. Relationship Between the Selected Item and the Advancement Possibilities Subscale for the Vocational Education Directors

All of the four independent variables in the advancement possibilities subscale were related significantly to the dependent variable "women successfully compete with men at this institution." The four independent variables were: 1) "the possibilities for a woman to be promoted to the next

Table 6.15

Restricted Model Regression Analysis Between the Dependent Variable "Women Successfully Compete with Men at this Institution" for the Female Vocational Faculty in Comprehensive High Schools and the Three Independent Variables from the Advancement Possibilities Subscale (N=501)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
6. The higher the educational attainment of women the greater the chances of their advancement.	.10	.04	2.59*
10. In this institution women are not as likely to achieve positions of leadership as men.	-.29	.04	8.09*
20. In general professional women are on par with professional men at this institution.	.46	.04	12.76*
Intercept	2.20	.26	

Standard Error of Estimate = .82

Multiple Correlation (R) = .65

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .41

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 118.46*

*Significant at the .05 level

academic rank, when eligible, are only fair," 2) "the higher the educational attainment of women the greater the chances of their advancement," 3) "in this institution women are not as likely to achieve positions of leadership as men," and 4) "in general professional women are on par with professional men at this institution." A multiple regression analysis was conducted to determine the amount of predictive information available from the advancement possibilities subscale. The results of the full model analysis are illustrated in Table 6.16. The student "t's" for only the following three independent variables were found to be significant: 1) "the higher the educational attainment of women the greater the chances of their advancement," 2) "in this institution women are not as likely to achieve positions of leadership as men," and 3) "in general professional women are on par with professional men at this institution."

A restricted model analysis was calculated to determine which variables possessed the most information useful for prediction. Table 6.17 displays the results of the restricted model. The standard error of estimate was .71, the total multiple correlation was .57, the coefficient of determination for degrees of freedom was .32, and the overall F-ratio was 73.16 which is significant at the .05 level.

The two independent variables in the restricted model possessed most of the information useful for predicting the dependent variable. Consequently, it was concluded that those vocational education directors who most strongly agreed that, "women successfully compete with men at this institution," also most strongly agreed that, "in general professional women are on par with professional men at this institution." But they most strongly disagreed with the statement that, "in this institution women are not as likely to achieve positions of leadership as men."

Table 6.16

Full Model Regression Analysis Between the Dependent Variable "Women Successfully Compete with Men at this Institution" for the Vocational Education Directors in Comprehensive High Schools and the Four Independent Variables in the Advancement Possibilities Subscale (N=314)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
6. The higher the educational attainment of women the greater the chances of their advancement.	.09	.05	1.98*
10. In this institution women are not as likely to achieve positions of leadership as men.	-.20	.03	5.96*
20. In general professional women are on par with professional men at this institution.	.39	.05	7.27*
Intercept	2.61	.33	

Standard Error of Estimate = .71

Multiple Correlation (R) = .58

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .32

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 38.33*

*Significant at the .05 level

Table 6.17

Restricted Model Regression Analysis Between the Dependent Variable "Women Successfully Compete with Men at this Institution" for the Vocational Education Directors in Comprehensive High Schools and the Two Independent Variables from the Advancement Possibilities Subscale (N=314)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
10. In this institution women are not as likely to achieve positions of leadership as men.	-.21	.03	6.20*
20. In general professional women are on par with professional men at this institution.	.41	.05	7.74*
Intercept	2.75	.27	

Standard Error of Estimate = .71

Multiple Correlation (R) = .57

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .32

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 73.16

*Significant at the .05 level

In summarizing the findings related to Question #6, it can be stated that:

1. Those female vocational faculty members who most strongly agreed that, "women successfully compete with men at this institution," also most strongly agreed that, "the higher the educational attainment of women the greater the chances of their advancement," and that, "in general professional women are on par with professional men at this

institution." But they most strongly disagreed with the statement that, "in this institution women are not as likely to achieve positions of leadership as men."

2. Those vocational education directors who most strongly agreed that, "women successfully compete with men at this institution," also most strongly agreed that, "in general professional women are on par with professional men at this institution." But they most strongly disagreed with the statement that, "in this institution women are not as likely to achieve positions of leadership as men."

Question #7. What is the relationship between the item "women have as much need to achieve as men," and the remaining items in the professional aspirations subscale for both the female vocational faculty members and the vocational education directors in comprehensive high schools?

Multiple regression analyses were conducted to determine the amount of predictive information available from the professional aspirations subscale (five independent variables) and the selected item "women have as much need to achieve as men," for the female vocational faculty members and the vocational education directors.

The analyses of relationships between the selected item and its respective subscale is presented in section XI.

XI. Relationships Between the Item "Women have as Much Need to Achieve as Men," and the Remaining Items in the Professional Aspirations Subscale for both the Female Vocational Faculty Members and the Vocational Education Directors in Comprehensive High Schools

In the following paragraphs, the relationships between the selected item and the remaining items in the professional aspirations subscale for both the female vocational faculty members and the vocational education directors are discussed.

A. Relationship Between the Selected Item and the Professional Aspirations Subscale for the Female Vocational Faculty Members

The five independent variables in the professional aspirations subscale were related significantly to the dependent variable "women have as much need to achieve as men." The five independent variables were: 1) "professional women can realistically expect to have a lifelong career"; 2) "a woman's professional career should be subservient to her husband's"; 3) "most women would like to be promoted to an administrative position"; 4) "most women would rather be promoted by merit rather than by seniority"; and 5) "most women, in your school, would like to end their educational careers as high school teachers." A multiple regression analysis was conducted to determine the amount of predictive information available from the professional aspirations subscale. The results of the full model analysis are illustrated in Table 6.18. The student "t's" for all the independent variables were found to be significant. Therefore, no further analysis of the data was necessary and it was concluded that those female vocational faculty members who most strongly agreed that, "women have as much need to achieve as men," also most strongly agreed that, "professional women can realistically expect to have a lifelong career." that, "most women would like to be promoted to an administrative position," and that, "most women would rather be promoted by

Table 6.18

Full Model Regression Analysis Between the Dependent Variable "Women have as Much Need to Achieve as Men" for the Female Vocational Faculty in Comprehensive High Schools and the Five Independent Variables in the Professional Aspirations Subscale (N=501)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
4. Professional women can realistically expect to have a lifelong career.	.11	.03	3.28*
12. A woman's professional career should be subservient to her husband's.	-.10	.02	4.21*
14. Most women would like to be promoted to an administrative position.	.09	.03	2.69*
18. Most women would rather be promoted by merit rather than by seniority.	.16	.04	4.50*
24. Most women, in your school, would like to end their educational careers as high school teachers.	-.06	.03	2.39*
Intercept	3.57	.24	

Standard Error of Estimate = .64

Multiple Correlation (R) = .36

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .12

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 14.59*

*Significant at the .05 level

merit rather than by seniority." But they most strongly disagreed with the statements that, "a woman's professional career should be subservient to her husband's," and that, "most women, in your school, would like to end their educational careers as high school teachers."

B. Relationship Between the Selected Item and the Professional Aspirations Subscale for the Vocational Education Directors

Three out of the five independent variables from the professional aspirations subscale were related significantly to the dependent variable "women have as much need to achieve as men." The three independent variables were: 1) "professional women can realistically expect to have a lifelong career," 2) "a woman's professional career should be subservient to her husband's," and 3) "most women would like to be promoted to an administrative position." A multiple regression analysis was conducted to determine the amount of predictive information available from the advancement possibilities subscale. The results of the full model analysis are illustrated in Table 6.19. The student "t's" for only the following three independent variables were found to be significant: 1) "professional women can realistically expect to have a lifelong career," 2) "a woman's professional career should be subservient to her husband's," and 3) "most women would like to be promoted to an administrative position."

A restricted model analysis was calculated to determine which variables possessed the most information useful for

Table 6.19

Full Model Regression Analysis Between the Dependent Variable "Women have as Much Need to Achieve as Men" for the Vocational Education Directors in Comprehensive High Schools and the Five Independent Variables in the Professional Aspirations Subscale (N=314)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
4. Professional women can realistically expect to have a lifelong career.	.15	.06	2.68*
12. A woman's professional career should be subservient to her husband's.	-.22	.04	5.59*
14. Most women would like to be promoted to an administrative position.	.10	.05	2.10*
Intercept	3.61	.37	

Standard Error of Estimate = .75

Multiple Correlation (R) = .39

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .14

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 11.12*

*Significant at the .05 level

prediction. Table 6.20 displays the results of the restricted model. The standard error of estimate was .76, the total multiple correlation was .38, the coefficient of determination adjusted for degrees of freedom was .13, and the overall F-ratio was 17.21 which is significant at the .05 level.

Table 6.20

Restricted Model Regression Analysis Between the Dependent Variable "Women have as Much Need to Achieve as Men" for the Vocational Education Directors in Comprehensive High Schools and the Three Independent Variables from the Professional Aspirations Subscale (N=314)

Variables	Partial Regression Coefficient	Standard Error	Student "t"
4. Professional women can realistically expect to have a lifelong career.	.15	.55	2.69*
12. A woman's professional career should be subservient to her husband's.	-.22	.38	5.87*
14. Most women would like to be promoted to an administrative position.	.11	.49	2.28*
Intercept	3.95	.30	

Standard Error of Estimate = .76

Multiple Correlation (R) = .38

Coefficient of Determination Adjusted for Degrees of Freedom ($\overline{R}^2$) = .13

Overall F-ratio $\frac{(MSR)}{(MSE)}$ = 17.21*

*Significant at the .05 level

It was apparent that the three independent variables in the restricted model possessed most of the information useful for predicting the dependent variable. Consequently, it was concluded that those vocational education directors who most strongly agreed that, "women have as much need to achieve as men," also most strongly that, "professional women can realistically expect to have a lifelong career," and that, "most women would like to be promoted to an administrative position." But they most strongly disagreed with the statement, "a woman's professional career should be subservient to her husband's."

In summarizing the findings related to Question #7, it can be stated:

1. Those female vocational faculty members who most strongly agreed that, "women have as much need to achieve as men," also most strongly agreed that, "professional women can realistically expect to have a lifelong career," that, "most women would like to be promoted to an administrative position," and that, "most women would rather be promoted by merit rather than by seniority." But they most strongly disagreed with the statements that, "a woman's professional career should be subservient to her husband's," and that, "most women, in your school, would like to end their educational careers as high school teachers."

2. Those vocational education directors who most strongly agreed that, "women have as much need to achieve as men," also most strongly agreed that, "professional women can realistically expect to have a

lifelong career," and that, "most women would like to be promoted to an administrative position." But they most strongly disagreed with the statement, "a woman's professional career should be subservient to her husband's."

Chapter 7

A COMPARISON BETWEEN THE FEMALE VOCATIONAL FACULTY MEMBERS' AND THE VOCATIONAL EDUCATION DIRECTORS' PERCEPTIONS OF THE DUAL-ROLE CONFLICT, ADVANCEMENT POSSIBILITIES, AND PROFESSIONAL ASPIRATIONS OF THE FEMALE VOCATIONAL FACULTY IN COMPREHENSIVE HIGH SCHOOLS

This chapter deals with the analysis of the perceptions of the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members as viewed by themselves and by the vocational education directors in comprehensive high schools. Specifically, this chapter answers Part III of the study which consisted of the following three null hypotheses:

Null Hypothesis #1. No significant differences exist between the female vocational faculty members and the vocational education directors in comprehensive high schools in their perception of the dual-role of the female vocational faculty members as measured by the dual-role conflict subscale.

Null Hypothesis #2. No significant differences exist between the female vocational faculty members and the vocational education directors in comprehensive high schools in their perception of the advancement possibilities of the female vocational faculty members as measured by the advancement possibilities subscale.

Null Hypothesis #3. No significant differences exist between the female vocational faculty members and the vocational education directors in comprehensive high schools in their perception of the professional aspirations of the female vocational faculty members as measured by the professional aspirations subscale.

The Behrens-Fisher t' Test was utilized to determine if there were significant differences between the female vocational faculty members and vocational education directors in their perception of the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members in comprehensive high schools. Each item in the three subscales had a score which ranged from a maximum score of five to a minimum score of one (5 = strongly agreed, 4 = agreed, 3 = undecided, 2 = disagreed, and 1 = strongly disagreed).

Table 7.1 displays the average score and its respective standard deviation for all the items in each of the three subscales (25 items) for both the female vocational faculty members and vocational education directors. All items in Table 7.1 have been identified in reference to their specific subscale (a = dual-role conflict, b = advancement possibilities, and c = professional aspirations).

Null Hypothesis #1

In order to respond to null hypothesis #1, a Behrens-Fisher t' Test was conducted to determine if there was a significant difference between the female vocational faculty members and vocational education directors in their perception of the dual-role conflict experienced by the female vocational faculty in comprehensive high schools. The results of this t' test analysis are presented in Table 7.2 and discussed in the following paragraphs.

The results of the t' test revealed that the average score for the female vocational faculty members in the dual-role conflict subscale was 3.55 with a standard deviation of .91. The average score for the vocational education directors in the dual-role conflict subscale was

Table 7.1

Mean Scores and Standard Deviations for each Item in the Dual-Role Conflict, Advancement Possibilities, and Professional Aspirations Subscales for the Female Vocational Faculty and the Vocational Education Directors in Comprehensive High Schools

Items	Females		Directors	
	Mean	S.D.	Mean	S.D.
1a. It is fine for a woman to work if her children are adequately cared for.	4.26	.88	4.25	.78
2b. The possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair.	4.04	.97	3.61	1.20
3a. Women can live in productive harmony with men filling complementary and supplementary roles.	4.21	.83	4.15	.85
4c. Professional women can realistically expect to have a lifelong career.	4.12	.84	4.16	.78
5a. A mother's working can be easily accepted by a child.	3.39	1.05	1.15	1.07
6b. The higher the educational attainment of women the greater the chances of their advancement.	3.93	.93	3.93	.87
7a. Marriage is an asset for professional women.	3.28	.97	3.29	.93
8c. Women have as much need to achieve as men.	4.46	.68	4.29	.81
9a. For professional women, children are an asset.	3.01	1.00	3.00	.94
10b. In this institution women are not as likely to achieve positions of leadership as men.	3.62	1.12	3.21	1.25
11a. It is possible to be successful at both marriage and a career.	4.32	.75	4.22	.74
12c. A woman's professional career should be subservient to her husband's.	2.61	1.17	2.56	1.12
13a. Professional women tend to think of employment as a lifetime career.	3.63	.91	3.55	.88

Table 7.1 (Continued)

Items	Females Mean	Females S.D.	Directors Mean	Directors S.D.
14c. Most women would like to be promoted to an administrative position.	2.63	.83	2.65	.87
15a. A woman's first responsibility is to be a feminine companion of men and a mother.	2.81	1.24	2.98	1.16
16b. Women successfully compete with men at this institution.	3.18	1.08	3.67	.86
17a. Women who want full equality should be prepared to accept equal responsibility.	4.60	.54	4.57	.53
18c. Most women would rather be promoted by merit rather than by seniority.	3.94	.83	3.64	.85
19a. Intellectual achievement of women is viewed as competitively aggressive behavior.	3.02	1.06	2.76	1.02
20b. In general professional women are on par with professional men at this institution.	3.48	1.08	3.87	.80
21a. Women in supervisory positions have difficulty dealing with males in subordinate positions.	2.82	.98	2.68	.98
22a. A co-educational faculty provides a healthy atmosphere.	4.49	.54	4.49	.54
23a. Career women play down feminine appearance in order to be taken seriously.	2.01	.92	2.25	.87
24c. Most women, in your school, would like to end their educational careers as high school teachers.	2.94	1.12	2.97	1.06
25a. Women have unique qualities to bring to the classroom that are not present in male faculty.	3.84	1.01	3.73	.99

[a] Dual-Role Conflict

[b] Advancement Possibilities

[c] Professional Aspirations

Table 7.2

Mean Scores, Standard Deviations and Behrens-Fisher t' Test Values for the Perception of the Dual-Role Conflict Experienced by the Female Vocational Faculty in Comprehensive High Schools as Viewed by Themselves and by the Vocational Education Directors

Group	N	Mean	S.D.	t' value
Female Vocational Faculty Members	501	3.55	.91	1.80[ns]
Vocational Education Directors	314	3.50	.88	

[ns] Not significant at the .05 level

3.50 with a standard deviation of .88. The obtained t' value for the 14 items designed to measure the dual-role conflict experienced by the female vocational faculty members in comprehensive high schools was 1.80, which is not significant at the .05 level. Therefore, these results indicate a failure to reject the proposed null hypothesis. Consequently, it was concluded that there is no significant difference between the female vocational faculty members and the vocational education directors in their perception of the dual-role conflict experienced by the female vocational faculty members in comprehensive high schools as measured by the dual-role conflict subscale.

Null Hypothesis #2

In order to respond to null hypothesis #2, a Behrens-Fisher t' Test was performed to determine if there was a significant difference between the female vocational faculty members and vocational education directors in their perception of the advancement possibilities available to the female vocational faculty members in comprehensive high schools. The results of the t' test analysis are presented in Table 7.3 and discussed in the following paragraphs.

Table 7.3

Mean Scores, Standard Deviations and Behrens-Fisher t' Test Values for the Perception of the Advancement Possibilities Available to the Female Vocational Faculty in Comprehensive High Schools as Viewed by Themselves and by the Vocational Education Directors

Group	N	Mean	S.D.	t' value
Female Vocational Faculty Members	501	3.66	1.04	.18[ns]
Vocational Education Directors	314	3.65	1.00	

[ns] Not significant at the .05 level

The results of the t' test revealed that the average score for the female vocational faculty members in the advancement possibilities subscale was 3.66 with a standard deviation of 1.04. The average score for the vocational education directors in the advancement possibilities subscale was 3.65 with a standard deviation of 1.00. The obtained t' value for the five items designed to measure the advancement possibilities available to the female vocational faculty members in comprehensive high schools was .18, which is not significant at the .05 level. Therefore, these results indicate a failure to reject the proposed null hypothesis. Consequently, it was concluded that there is no significant difference between the female vocational faculty members and the vocational education directors in their perception of the advancement possibilities available to the female vocational faculty members in comprehensive high schools as measured by the advancement possibilities subscale.

Null Hypothesis #3

In order to respond to null hypothesis #3, a Behrens-Fisher t' test was performed to determine if there was a significant difference between the female vocational faculty members and vocational education directors in their perception of the professional aspirations of the female vocational faculty members in comprehensive high schools. The results of this t' test analysis are presented in Table 7.4 and discussed in the following paragraphs.

Table 7.4

Mean Scores, Standard Deviations and Behrens-Fisher t' Test Values for the Perception of the Professional Aspirations of the Female Vocational Faculty in Comprehensive High Schools as Viewed by Themselves and by the Vocational Education Directors

Group	N	Mean	S.D.	t' value
Female Vocational Faculty Members	501	3.46	.91	2.79*
Vocational Education Directors	314	3.38	.92	

*Significant at the .05 level

The results of the t' test revealed that the average score for the female vocational faculty members in the professional aspirations subscale was 3.46 with a standard deviation of .91. The average score for the vocational education directors in the professional aspirations subscale was 3.38 with a standard deviation of .92. The obtained t' value for the six items designed to measure the professional aspirations of the female vocational faculty members in comprehensive high schools was 2.79, which is significant at the .05 level. Based on these results, the proposed null hypothesis was rejected. Consequently, it was concluded that there is a significant difference between the female vocational faculty members and the vocational education directors in their perception of the professional aspirations of the female vocational faculty members in comprehensive high schools as measured by the professional aspirations subscale.

A Behrens-Fisher t' Test was conducted to each of the six items in the professional aspirations subscale. The individual item t' test analysis was used to identify those items in the professional aspirations subscale that the female vocational faculty members and vocational education directors perceived significantly different. The results of the t' tests are presented in Table 7.5 and discussed in the following paragraphs.

The results of the six t' test analyses revealed that in only two out of the six items did the average female vocational faculty members and the average vocational education directors disagree significantly. The two items were: 1) "women have as much need to achieve as men," and 2) "most women would rather be promoted by merit rather than by seniority."

The results of the t' test for the item "women have as much need to achieve as men" revealed that the average score for the female vocational faculty members was 4.46 with a standard deviation of .68 and the average score for the vocational education directors was 4.29 with a standard deviation of .81. The obtained t' value for this item was

Table 7.5

Mean Scores, Standard Deviations, and Behrens-Fisher T' Test Values for each of the Six Items in the Professional Aspirations Subscale for the Female Vocational Faculty and Vocational Education Directors in Comprehensive High Schools

	Females		Directors		t'
Items	Mean	S.D.	Mean	S.D.	value
8. Women have as much need to achieve as men.	4.46	.68	4.29	.81	-3.20*
18. Most women would rather be promoted by merit rather than by seniority.	3.94	.83	3.64	.85	-5.23*

*Significant at the .05 level

-3.20 which is significant at the .05 level. The results of the t' test for the item "most women would rather be promoted by merit rather than by seniority" revealed that the average score for the female vocational faculty members was 3.94 with a standard deviation of .83 and the average score for the vocational education directors was 3.64 with a standard deviation of .85. The obtained t' value for this item was -5.23 which is significant at the .05 level.

Consequently, it was concluded that there are significant differences between the female vocational faculty members and the vocational education directors in their perception of the items: 1) "women have as much need to achieve as men," and 2) "most women would rather be promoted by merit rather than by seniority." Furthermore, the female vocational faculty members perceived their need for achievement significantly higher than it was perceived by the vocational education .

directors. Finally, the female vocational faculty members perceived women desiring promotions by merit rather than by seniority significantly higher than was perceived by the vocational education directors.

In summarization, it was found that:

1. There is no significant difference between the female vocational faculty members and the vocational education directors in their perception of the dual-role conflict experienced by the female vocational faculty members in comprehensive high schools.

2. There is no significant difference between the female vocational faculty members and the vocational education directors in their perception of the advancement possibilities available to the female vocational faculty members in comprehensive high schools.

3. There are significant differences between the female vocational faculty members and the vocational education directors in their perception of the professional aspirations of the female vocational faculty members in comprehensive high schools. Specifically, the female vocational faculty perceive a need for achievement and a desire for promotions based on merit rather than on seniority significantly higher than these items are perceived by the vocational education directors.

Chapter 8

SUMMARY, DISCUSSIONS AND RECOMMENDATIONS

This chapter provides a summary of the study, a discussion based upon the findings, and recommendations derived from the findings and discussion.

Summary

In summarizing the study, it was divided into the following four areas: 1) introduction, 2) statement of the problems, 3) procedures, and 4) findings.

Introduction

It can be said that life in America is, has been, and will be marked by some kind of struggle. The seventeenth century was the century in which the pioneers struggled to survive; the eighteenth century was transformed into a struggle for independence; the nineteenth century was marked by the struggle to end slavery; and the twentieth century may well be remembered as the century of struggle for women's equality.

Whether the twentieth century becomes the century of women's equality or not, it seems that the future role of women in American society will be a vital ingredient in determining the country's economic and international status. Recognizing how essential women are to the productivity of this nation and that any discriminatory treatment against them can only be harmful, Congress on March 22, 1972 passed the Equal Rights for Women to the United States Constitution and sent it to the states for ratification.

While Congress may have the power to guarantee equal employment opportunities for all men and women of this nation, it is upon these men and women that the power to alter attitudes lies. It will be up to researchers to show the status and roles played by both men and women in different working situations. Because of their influential position in developing careers, the schools are an excellent focus for such research. From these efforts school administrators will learn of misconceptions that they may have regarding the roles of their employees.

Statement of the Problem

The study was designed to: 1) Determine some biographical characteristics of the female vocational faculty members and the vocational education directors in comprehensive high schools. 2) Ascertain the perceptions of the female vocational faculty members and that of the vocational education directors regarding the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members in comprehensive high schools. 3) Compare the perceptions of the female vocational faculty members as seen by themselves and by the vocational education directors in comprehensive high schools.

Procedures

The sample used in the study consisted of vocational education directors and female vocational faculty members from 15,314 comprehensive high schools located in the 50 states, the Canal Zone, Puerto Rico, and the Trust Territory. Three hundred and fourteen vocational education directors and 512 female vocational faculty members were used in the study. A two-part instrument was used to achieve the objectives of the study. The first part of the instrument was designed to measure status and the second part was designed to measure differences in perceptions between the female vocational faculty members and vocational education directors in their perception of the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members in comprehensive high schools.

Several statistical treatments were utilized to analyze the data and to answer the questions and hypotheses posed. In answering Part I, Question #1 of the study, the means, standard deviations, and ranges were utilized. In answering Part II, Question #2 of the study, an item analysis of each subscale (dual-role conflict, advancement possibilities, and professional aspirations) was conducted. In answering Part II, Questions #3, #4, #5, #6, and #7 of the study, multiple regression analysis techniques were employed. In answering Part III of the study, the Behrens-Fisher t' Test was utilized.

Findings

It was found that the average female vocational faculty member is 38 years old, married, with 2.2 children, and earns an annual salary of $10,000. She has a bachelor's degree, holds permanent certification in her field of specialization, and nine out of ten times is teaching home economics or business education. The average vocational education director in comprehensive high schools, on the other hand, is a male, 43 years old, married, with 2.5 children, and earns an annual salary of

$14,200. He has a master's degree, has a permanent administrative appointment in his present institution and has been working in vocational education for 8.5 years.

An examination of the dual-role conflict subscale, which was designed to measure differences in the perception of the dual-role conflict experienced by the female vocational faculty members in comprehensive high schools, revealed that: 1) a greater percentage of vocational education directors than female vocational faculty members agreed that it is fine for a woman to work if her children are adequately cared for; 2) a greater percentage of directors than female faculty agreed that a woman's first responsibility is to be a feminine companion of men and a mother; 3) a greater percentage of vocational education directors than female vocational faculty members disagreed that intellectual achievement of women is viewed as competitively aggressive behavior; 4) a greater percentage of directors than female faculty disagreed that women in supervisory positions have difficulty dealing with males in subordinate positions; and 5) more female faculty disagreed than agreed that for professional women, children are an asset.

The results obtained from the advancement possibilities subscale, which was designed to measure differences in the perception of the advancement possibilities available to the female vocational faculty members in comprehensive high schools, revealed that: 1) a greater percentage of vocational education directors than female vocational faculty members disagreed that the possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair; 2) a greater percentage of directors than female faculty agreed that the higher the educational attainment of women the greater the chances of their advancement; and 3) a greater percentage of vocational education directors than female vocational faculty agreed that women successfully compete with men at their institution.

The professional aspirations subscale, which was designed to measure differences in the perception of the professional aspirations of the female vocational faculty members in comprehensive high schools, revealed that: 1) the great majority of the female vocational faculty and vocational education directors believe that women have as much need to achieve as men and that professional women can expect to have a lifetime career; 2) a greater percentage of female vocational faculty members than vocational education directors believe that a woman's professional career should be subservient to her husband's; 3) a greater percentage of the female vocational faculty than vocational education directors believe that most women would not like to be promoted to an administrative position; and 4) the majority of the female vocational faculty members and vocational education directors believe that most women would rather be promoted by merit rather than by seniority.

The analyses of relationships between the age of the female vocational faculty and each of the three subscales revealed that: 1) There is a significant relationship between the age of the female vocational faculty members and their perception of their dual-role conflict. Specifically, those females who are older most often agreed that for professional women, children are an asset, and that career women play down feminine appearance in order to be taken seriously. But they most often disagreed that intellectual achievement of women is viewed as competitively aggressive behavior. 2) There is no relationship between the age of the female vocational faculty members and their perception of their advancement possibilities and professional aspirations.

A study of the relationships between the years that the female vocational faculty have worked at their present institution and each of the three subscales revealed that there are no significant relationships between the number of years that the female vocational faculty members have worked at their present institution and their perception of their dual-role conflict, advancement possibilities, and professional aspirations.

An examination of the relationships between the salary earned by the female vocational faculty and each of the three subscales revealed that there are no significant relationships between the salary of the female vocational faculty members and their perception of their dual-role conflict, advancement possibilities, and professional aspirations.

Analyses of relationships between the year the female vocational faculty earned their highest degree and each of the three subscales revealed that: 1) There is a significant relationship between the year the female vocational faculty members earned their highest degree and their perception of their dual-role conflict. Specifically, those female vocational faculty members who most recently earned their highest degree, most often agreed that women can live in productive harmony with men filling complementary and supplementary roles and that intellectual achievement of women is viewed as competitively aggressive behavior. But they most often disagreed that for professional women, children are an asset. 2) There are no significant relationships between the year the female vocational faculty members earned their highest degree and their perception of their advancement possibilities and their professional aspirations.

A study of the relationships between the age of the vocational education directors and each of the three subscales revealed that there are no significant relationships between the age of the vocational education directors and their perception of the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members in comprehensive high schools.

Analyses of relationships between the number of years that the vocational education directors have worked at their present institution and each of the three subscales revealed that there are no significant relationships between the number of years that the vocational education directors have worked at their present institution and their perception of the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members.

An examination of the relationships between the salary earned by the vocational education directors and each of the three subscales revealed that: 1) There is a significant relationship between the salary of the vocational education directors and their perception of the dual-role conflict. Specifically, those vocational education directors who earn the highest salaries most often disagreed that it is possible to be successful at both marriage and a career, that a woman's first responsibility is to be a feminine companion of men and a mother, and that intellectual achievement of women is viewed as competitively aggressive behavior. 2) There are no significant relationships between the salary of the vocational education directors and their perception of the advancement possibilities and professional aspirations of the female vocational faculty members in comprehensive high schools.

A study of the relationships between the year in which the vocational education directors received their highest degree and each of the three subscales revealed that: 1) There is a significant relationship between the year the vocational education directors earned their highest degree and their perception of the dual-role conflict experienced by the female vocational faculty in comprehensive high schools. Specifically, those vocational education directors who most recently earned their highest degree, most often agreed that for professional women, children are an asset, but they most often disagreed that it is possible to be successful at both marriage and a career. 2) There are no significant relationships between the year in which the vocational education directors earned their highest degree and their perception of the female vocational faculty members' advancement possibilities and professional aspirations.

Analyses of relationships between the selected item, marriage is an asset for professional women, in the dual-role conflict subscale and the remaining items in that subscale for both the female vocational faculty and vocational education directors revealed that: 1) Those female vocational faculty members who most strongly agreed that marriage is an asset for professional women, also most strongly agreed that for professional women, children are an asset, and that it is possible to be successful at both marriage and a career. 2) Those vocational education directors who most strongly agreed that marriage is an asset for professional women, also most strongly agreed that, for professional women, children are an asset, and that professional women tend to think of employment as a lifetime career.

An examination of the relationships between the selected item "women successfully compete with men at this institution" in the advancement possibilities subscale and the remaining items in that subscale for both the female vocational faculty and vocational education directors revealed that: 1) Those female vocational faculty members who most strongly agreed that women successfully compete with men at this institution, also most strongly agreed that the higher the educational attainment of women the greater the chances of their advancement, and that in general professional women are on par with professional men at this institution. But they most strongly disagreed that in this institution women are not as likely to achieve positions of leadership as men. 2) Those vocational education directors who most strongly agreed that women successfully compete with men at this institution, also most strongly agreed that in general professional women are on par with professional men at this institution. But they most strongly disagreed that in this institution women are not as likely to achieve positions of leadership as men.

A study of the relationships between the selected item "women have as much need to achieve as men" in the professional aspirations subscale and the remaining items in that subscale for both the female vocational faculty and vocational education directors revealed that: 1) Those female vocational faculty members who most strongly agreed that women have as much need to achieve as men also most strongly agreed that professional women can realistically expect to have a lifelong career, that most women would like to be promoted to an administrative position, and that most women would rather be promoted by merit rather than by seniority. But they most strongly disagreed that a woman's professional career should be subservient to her husband's, and that most women, in your school, would like to end their educational careers as high school teachers. 2) Those vocational education directors who most strongly agreed that women have as much need to achieve as men, also most strongly agreed that professional women can realistically expect to have a lifelong career, and that most women would like to be promoted to an administrative position. But they most strongly disagreed that a woman's professional career should be subservient to her husband's.

A comparison between the female vocational faculty members' and the vocational education directors' perception of the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty in comprehensive high schools revealed that: 1) There is no significant difference between the female vocational faculty members and the vocational education directors in their perception of the dual-role conflict experienced by the female vocational faculty or their perception of the advancement possibilities available to these females. 2) There is a significant difference between the female vocational faculty members and the vocational education directors in their perception of the professional aspirations of the female vocational faculty in comprehensive high schools. The female vocational faculty members perceive a need for achievement and a desire for promotions based on merit rather than on seniority significantly higher than these items are perceived by the vocational education directors.

Discussion

The discussion of this study is in two parts. The first part centers on the biographical characteristics of the female vocational faculty members and vocational education directors in comprehensive high schools. The second part centers on the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members as perceived by themselves and by the vocational education directors in comprehensive high schools.

Biographical Characteristics

The study has provided a profile of the typical female vocational faculty member and vocational education director in comprehensive high schools. The findings of the study revealed that one out of three female vocational faculty members were classified as nonmarried and that almost half of the total female vocational faculty members had no children, even though their average age is 38 years old. These findings may be an indication that many female vocational faculty members who decide to engage in a lifelong career may have to do so at the expense of having a family.

The findings also confirm the entrenchment of women in the fields of home economics and business education. These two fields not only have 88.2 percent of the total female vocational faculty members in comprehensive high schools, but as reported by Evans (1971) these two fields enroll 90 percent of the total female students in secondary vocational education. Female participation in technical education in comprehensive high schools has been non-existent and their participation in trade and industrial education as well as in agricultural education has only been minimal.

The study also revealed that nine out of ten vocational education directors in comprehensive high schools were married. Graphs showing the age of the directors and the number of children that they have, revealed that these variables tended to form a normal curve shape. When the graph of the vocational education directors' salaries were analyzed, it was found that their salaries tended to form a rectangular shape, whereas the salaries of the female vocational faculty members tended to form an asymptotic curve shape with the greater number of females in the lower salary range. The type of working experience that the vocational education directors indicated they have (teaching, vocational education, industrial, etc.) was very similar to that indicated by the female vocational faculty members with the exception of school administration, where the directors had three times more experience than the female vocational faculty members.

Dual-Role Conflict

The study of the findings regarding the dual-role conflict experienced by the female vocational faculty members in comprehensive high schools indicated that there is no significant difference between the female vocational faculty and directors in their perception of the dual-role conflict experienced by the female vocational faculty in comprehensive high schools. The female vocational faculty and the vocational education directors perceived the women's role, first as a mother then as a professional. On the other hand, the females and directors agreed that women have unique qualities to bring to the classroom and that a co-educational faculty provides a healthy atmosphere. Older female vocational faculty members tended to believe that children are an asset for professional women. Those directors who most recently received their highest degree and who earned the highest salaries tended to believe that women can not be successful at both marriage and a career. It appears that if a woman is to be successful as a professional she must also be successful as a mother. If not, she will have to confine herself to one role or the other, that of a professional or that of a mother.

Advancement Possibilities

The analysis of the findings regarding the advancement possibilities of the female vocational faculty members in comprehensive high schools revealed that there is no significant differences between the female vocational faculty and the vocational education directors in their perception of the advancement possibilities available to the female vocational faculty in comprehensive high schools. However, some degree of confusion and inconsistency existed among these respondents. The majority of both the female vocational faculty and the vocational education directors agreed that in their institution, women are not as likely to achieve positions of leadership as men, but they also agreed that women successfully compete with men at their institution.

Professional Aspirations

An examination of the findings regarding the professional aspirations of the female vocational faculty members revealed that there are significant differences between the female vocational faculty members and the vocational education directors in their perception of the professional aspirations of the female vocational faculty in comprehensive high schools. These female vocational faculty members perceived a need for achievement and a desire for promotions based on merit rather than on seniority significantly higher than these items are perceived by the vocational education directors. The majority of the female vocational faculty and vocational education directors disagreed that most women would like to be promoted to an administrative position. The majority of the female vocational faculty agreed that their professional career should be subservient to their husband's. It appears that although the female vocational faculty's professional aspirations are higher than that perceived by the directors, these females still perceive their profession secondary to that of their husbands. Perhaps this might be impeding female vocational faculty members from moving into some positions.

The elimination of all barriers that might be preventing female vocational faculty from obtaining higher positions will enable those female faculty members who are qualified and so desire to have the chance to move into or stay in positions where their talents will be best utilized according to their will. The refusal to remove these barriers may dare some of these female vocational faculty members to demonstrate for their rights. This final point is already taking place in colleges and universities where women during the years 1970 and 1971 filed 360 discriminatory charges and none of them were disputed by the Department of Health, Education, and Welfare (Sandler, 1972). It seems appropriate to mention that since discrimination tends to tarnish the motivation to choose, it will take generations for the female vocational faculty members to fully realize their capabilities and to accept the professional responsibilities that are inherited in these higher status positions. Hopefully by then, men in comprehensive high schools will be able to accept women in all positions without reservations.

Recommendations

Based on the findings and discussion of this study, the following recommendations are made:

1. As the role and status of women changes in our society replica studies should be conducted to determine the nature and extent of these role and status changes.

2. Studies need to be conducted on male administrators' self-perception of their professional duties and responsibilities associated with their employment. In assisting male administrators to recognize their role perception it is hoped that a better understanding of professional women will be achieved and thus current myths pertaining to the professional women's dual-role conflict be reduced.

3. In-service and pre-service training should be provided to all school personnel on how their jobs relate to other functions within the schools employment duties and responsibilities. Communication techniques and parameters for personal growth and development on the job need to be conducted to eradicate current misconceptions that exist regarding the dual-role conflict, advancement possibilities, and professional aspirations of the female vocational faculty members.

4. All professional teacher associations should encourage and support legislation and policy decisions that eliminate sex related barriers that may be impeding highly qualified and talented women and men from entering certain fields or positions.

5. More females should be encouraged to further their studies in the area of school supervision and administration to enhance their opportunities for higher administrative positions.

6. As the role of married women as professionals emerges in our society more efforts must be made to educate men on sharing homemaking and childrearing responsibilities. It is hoped that equal employment opportunities will result through sharing home responsibilities and thus reducing the female dual-role conflict.

REFERENCES

Alden, John. "Minorities in Engineering: It's Not All Black and White," New Engineer, January 1974, pp. 32-35.

American Educational Research Association. Task Force on Training Research and Research Related Personnel. No. 13, September 1970.

American Historical Association. Final Report on the Commission on the Status of Women in the Historical Profession. U.S., Educational Resources Information Center, ERIC Documents ED 065 065, 1972.

Bem, Sandra L., and Daryl J. Bem. Training the Woman to Know Her Place: The Social Antecedents of Women in the World of Work. Harrisburg: Pennsylvania Department of Education, 1973.

Bloom, Karen L., Angelo C. Gillie, and Larry L. Leslie. Goals and Ambivalence: Faculty Values and The Community College Philosophy. Center for the Study of Higher Education. University Park: The Pennsylvania State University, 1971.

Bowen, William G., and T. Aldrich Finegan. The Economic of Labor Force Participation. Princeton: Princeton University Press, 1969.

Brine, Ruth. "Situation Report," Time, March 20, 1972, p. 68.

________________. "Slow Gains at Work," Time, March 20, 1972, pp. 80-82.

Brookover, Wilbur B. A Sociology of Education. New York: American, 1955.

Burgess, Ernest W. "The Family as a Unit of Interacting Personalities." Family Roles and Interaction: An Anthology, ed. Jerold Heiss. Chicago: Rand McNally, 1969.

Calabrese, Maureen. The Academic Women Case Study: IWU. U.S., Educational Resources Information Center, ERIC Document ED 065 022, 1972.

Caplow, Theodore. The Sociology of Work. New York: McGraw-Hill, 1954.

Coleman, James S. "Academic Achievement and the Structure of Competition," Harvard Educational Review, XXIX (1959), 230-251.

Conant, James B. The American High School Today. New York: McGraw-Hill, 1959.

Coombs, Robert H. "Value Consensus and Partner Satisfaction Among Dating Couples," *Journal of Marriage and the Family*, XXVII (1966), 166-173.

Corwin, Ronald G. *A Sociology of Education*. New York: Appleton-Century-Crofts, 1965.

Diamond, Ester E. "Occupational Interests: Male-Female or High Level-Low Level Dichotomy," Journal of Vocational Behavior, I (October 1971), 305-315.

Dodge, Norton T. *Women in the Soviet Economy*. Baltimore: The John Hopkins Press, 1966.

Ehrlich, H. J. *Selected Differences in the Life Changes of Men and Women in the United States*. No. 1. Baltimore: Research and Development, 1972.

Ekstrom, Ruth B. *Barriers to Women's Participation in Post-Secondary Education: A Review of the Literature*. U.S. Educational Resources Information Center, ERIC Document ED 072 368, 1973.

Empey, LaMar T. "Social Class and Occupational Aspirations: A Comparison of Absolute and Relative Measurements," *American Sociological Review*, XXI (December, 1956), 703-709.

Evans, Rupert. *Foundations of Vocational Education*. Columbus: Charles E. Merrill, 1971.

Farmer, Helen S. "Helping Women to Resolve the Home-Career Conflict," *Personnel and Guidance Journal*, XLIX (June, 1971), 795-801.

Freeman, Jo. *Women on the Social Faculties Since 1892*. U.S. Educational Resources Information Center, ERIC Document ED 041 567, 1970.

Games, Paul A. Supplementary Readings for Ed.Psy. 406. Unpublished, The Pennsylvania State University, 1972.

Getzels, Jacob. "Conflict and Role Behavior in the Educational Setting," *Society and Education: A Book of Readings*, ed. Robert J. Havighurst, and others. 2d ed. Boston: Allyn and Bacon, 1971.

Gillie, Angelo C. *Principles of Post-Secondary Vocational Education*. Columbus: Charles E. Merrill, 1973.

Gilman, Richard. "Where Did It All Go Wrong?" *Life*, August 13, 1971, 48-55.

Ginzberg, Eli. *Life Styles of Educated Women*. New York: Columbia University Press, 1966.

Goldberg, Philip. "Are Women Prejudiced Against Women?" *Transaction*, April 1968, pp. 28-30.

Gross, Neal, Mason S. Ward, and Alexander W. McEachern. *Explorations in Role Analysis: Studies of the Superintendency Role*. New York: John Wiley and Sons, 1953.

Heiss, Jerold (ed.). *Family Roles and Interaction: An Anthology*. Chicago: Rand McNally, 1969.

Herr, Edward and Stanley Cramer. *Vocational Guidance and Career Development in the Schools: Towards a Systems Approach*. New York: Houghton Mifflin, 1972.

Hilgard, Ernest R. *Introduction to Psychology*. 3d ed. New York: Harcourt, Brace, & World, 1962.

Hoppock, Robert. *Job Satisfaction*. New York: Harper and Brothers, 1935.

Ilyina, K. G. "The Participation of Women in the Economic Activities in the Soviet Union," *World Population Conference*. 2d ed. IV. Belgrade, 1965.

Ingram, Anne. *Beliefs of Women Faculty About Discrimination*. U.S. Educational Resources Information Center, ERIC Document ED 075 005, 1973.

Issacson, Lee E. *Career Information in Counseling and Teaching*. Boston: Allyn and Bacon, 1973.

Jacobson, Allvar Hilding. "Conflict of Attitude Toward the Roles of the Husband and Wife in Marriage," *Family Roles and Interaction: An Anthology*, ed. Jerold Heiss. Chicago: Rand McNally, 1969.

Jenks, Christopher, and others. *Inequality A Reassessment of the Effect of Family and Schooling in America*. New York: Harper Colophon, 1972.

Karman, Felice J. "Women: Personal and Environmental Factors in Career Choice," Paper presented at the annual meeting of the American Educational Research Association, New Orleans, February 1973.

Kern, Edward. "The 'Women Problem' Part II," *Life*, August 20, 1971, pp. 40-51.

King, Elizabeth Camp. *Perceptions of Female Vocational Faculty Members as Seen by Themselves and College Administrators*. University Park: The Pennsylvania State University, August 1974.

Kohr, Richard Louis. "A Comparison of Statistical Procedures for Testing $M_1 = M_2$ With Unequal n's and Variances," Unpublished Ph.D. Dissertation, The Pennsylvania State University, 1970.

Kornhouser, Ruth R. "The Warner Approach to Social Stratification," *Class, Status, and Power*, ed. Reinhard Bendix and Seymour M. Lipset. Illinois: Free Press, 1953.

Kotlar, Sally. "Middle-Class Marital Role Perception and Marital Adjustment," *Sociology and Social Research*, XLIX (1965), 283-293.

Krejcie, Robert V., and Daryle W. Morgan. "Determining Sample Size for Research Activities," *Educational and Psychological Measurement*, No. 20, 1970, pp. 607-610.

Levinger, George, and James Breedlove. "Interpersonal Attraction and Agreement: A Study of Marriage Partners," *Journal of Personality and Social Psychology*, III (1966), 367-372.

Levitan, Sar A., Garth L. Mangun, and Ray Marshall. *Human Resources and Labor Markets: Labor and Manpower in the American Economy*. New York: Harper and Row, 1972.

Levitt, Eleanor S. "Vocational Development of Professional Women: A Review," *Journal of Vocational Behavior*, I (October 1971), 375-385.

Lewis, Robert. "A Developmental Framework for the Analysis of Premarital Dyadic Formation," *Family Process*, XI (March 1972), 17-48.

Li, Jerome C. R. *Statistical Inference: IC*. Ann Arbor: Edwards Brothers, 1967.

Lipham, James Maurice. "Personal Variables Related to Administrative Effectiveness." Unpublished Ph.D. dissertation, University of Chicago, 1960.

Luckey, Eleanore Braun. "Marital Satisfaction and Congruent Self-Spouse Concepts." *Family Roles and Interaction: An Anthology*, ed. Jerold Heiss. Chicago: Rand McNally, 1969.

Lyon, Catherine Dillon, and Terry N. Saario. "Women in Public Education: Sexual Discrimination in Promotions," *Phi Delta Kappan*, LV (October, 1973), 120-123.

Maccoby, Herbert. "Controversy, Neutrality, and Higher Education," *American Sociological Review*, XXV (1960), 884-893.

Mackay, Maxine. *Status of Women Committee: Faculty Report*. U.S., Educational Resources Information Center, ERIC Document ED 049 688, 1971.

MacKenna, Ken. "If Creeping Boredom is Your Work Problem . . . ," *Today's Health*, August 1972, p. 45.

Mason, Ward S., and Neal Gross. "Intra-Occupational Prestige Differentiations: The School Superintendency," American Sociological Review, June 20, 1955, pp. 236-331.

________________, Robert J. Dressel, and Robert K. Bain. "Sex Role and Career Orientations of Beginning Teachers," Harvard Educational Review, XXIX (1959), pp. 370-383.

Mayer, Kurt B. "The Changing Shape of the American Class Structure," Society and Education: A Book of Readings, ed. Robert J. Havighurst, and others. 2d ed. Boston: Allyn and Bacon, 1971.

McAllester, Susan. A Case for Equality: Women in English Departments. U.S., Educational Resources Information Center, ERIC Document ED 057 020, 1972.

Merton, Robert K. "Role-Set: Problems in Sociological Theory," British Journal of Sociology, VII (June, 1951), 106-120.

Miner, Anne S. Academic Employment of Women at Stanford. U.S., Educational Resources Information Center, ERIC Document ED 063 893, 1972.

Minturn, Leigh. Inequalities in Salary Payments to Faculty Women. U.S., Educational Resources Information Center, ERIC Document ED 045 045, 1971.

Moyer, Donald C. "Teachers' Attitudes Toward Leadership as They Relate to Teacher Satisfaction." Unpublished Ph.D. dissertation, University of Chicago, 1954.

Nettler, Gwynn. Explaining Crime. New York: McGraw-Hill, 1974.

Osso, Nicholas A. Directory of Secondary Schools with Occupational Curriculums Public and Nonpublic 1971. U.S. DHEW Publication No. (OE)73-11409. Washington: Government Printing Office, 1973.

Robinson, Lora H. The Status of Academic Women, U.S., Educational Resources Information Center, ERIC Document ED 048 523, 1971.

Roe, Ann. The Psychology of Occupation. New York: Wiley, 1956.

Sandler, Bernice. What Constitutes Equality for Women in Higher Education? U.S., Educational Resources Information Center, ERIC Document ED 061 870, 1972.

Scheneider, Eugene V. Industrial Sociology. 2d ed. New York: McGraw-Hill, 1969.

Schlossberg, Nancy K., and Jane Goodman. "A Woman's Place: Children's Sex Stereotyping of Occupations," Vocational Guidance Quarterly, June 1972, 266-270.

Sharp, Laure M. Study of NDEA Title IV Fellowship Program. Washington D.C.: Bureau of Social Science Research, July 1970.

Sheppard, Harold L. "Discontented blue-collar workers - a case study," Monthly Labor Review, April 1971, pp. 25-32.

Smuts, Robert W. Women and Work in America. New York: Schocken, 1971.

Status of Women Faculty at Illinois State University 1970-71. U.S., Educational Resources Information Center, ERIC Document ED 058 836, 1971.

Survey Research Center. "1969 Survey of Working Conditions," University of Michigan, 1969.

The Status of Women Faculty at Bowling Green State University. U.S., Educational Resources Information Center, ERIC Document ED 066 144, 1972.

Thomas, Lawrence G. The Occupational Structure and Education. Englewood Cliffs: Prentice-Hall, 1956.

Trotsky, Leon. Women and the Family. New York: Pathfinder Press, 1970.

U.S. Department of Labor, Wage and Labor Standards Administration, Women's Bureau. Handbook on Women Workers, 1969. Bulletin 294.

U.S. Superintendent of Documents. Manpower Report of the President. Washington: Government Printing Office, 1947.

Van Fleet, David. Salaries of Males and Females: A Sample of Conditions at the University of Akron. U.S., Educational Resources Information Center, ERIC Document ED 056 638, 1972.

Wolfe, Helen. Women in the World of Work. The University of the State of New York. Albany: The State Education Department, 1969.

Women Faculty in the University of Pennsylvania. U.S., Educational Resources Information Center, ERIC Document ED 056 635, 1971.

Woolf, Henry Bosley, (ed.) Webster's New Collegiate Dictionary. Phillippines: G. & C. Merriam, 1973.

Wrenn, Gilbert C. The Counselor in a Changing World. Washington, D.C.: American Personnel and Guidance, 1962.

Zalenznik, Abraham. Worker Satisfaction and Development: A Case Study of Work and Social Behavior in a Factory Group. Massachusetts: The Plimpton Press, 1956.

APPENDIX A

Dual-Role Conflict Subscale
Advancement Possibilities Subscale
Professional Aspirations Subscale

DUAL-ROLE CONFLICT SUBSCALE

Items

1. It is fine for a woman to work if her children are adequately cared for.

3. Women can live in productive harmony with men filling complementary and supplementary roles.

5. A mother's working can be easily accepted by a child.

7. Marriage is an asset for professional women.

9. For professional women children are an asset.

11. It is possible to be successful at both marriage and a career.

13. Professional women tend to think of employment as a lifetime career.

15. A woman's first responsibility is to be a feminine companion of men and a mother.

17. Women who want full equality should be prepared to accept equal responsibility.

19. Intellectual achievement of women is viewed as competitively aggressive behavior.

21. Women in supervisory positions have difficulty dealing with males in subordinate positions.

22. A co-educational faculty provides a healthy atmosphere.

23. Career women play down feminine appearance in order to be taken seriously.

25. Women have unique qualities to bring to the classroom that are not present in male faculty.

ADVANCEMENT POSSIBILITIES SUBSCALE

Items

2. The possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair.

6. The higher the educational attainment of women the greater the chances of their advancement.

10. In this institution women are not as likely to achieve positions of leadership as men.

16. Women successfully compete with men at this institution.

20. In general professional women are on par with professional men at this institution

PROFESSIONAL ASPIRATIONS SUBSCALE

Items

4. Professional women can realistically expect to have a lifelong career.

8. Women have as much need to achieve as men.

12. A woman's professional career should be subservient to her husband's.

18. Most women would rather be promoted by merit rather than by seniority.

24. Most women, in your school, would like to end their educational careers as high school teachers.

APPENDIX B

Cover Letter to Vocational Education Directors
Two-Part Instrument

January 7, 1974

Dear Colleague:

I am sure you are aware of the need for additional research concerning professional women in secondary education.

The Department of Vocational Education at The Pennsylvania State University is conducting a nationwide study to determine:

1. The status of professional women in vocational education in the comprehensive high schools.
2. The similarities and differences in perceptions of female vocational faculty members as seen by themselves and school administrators.

You have been randomly selected to be one of the administrator respondents for this investigation. Your role in this effort, should you be kind enough to help us, is the following:

1. Provide us with a roster of your vocational teachers and administrative staff, and courses assigned to them (we will randomly sample several of your female vocational program faculty from this list).
2. Complete the enclosed questionnaire to aid us in compiling certain characteristics relative to the place of professional women in comprehensive high school vocational programs.

The questionnaire has been carefully coded so as to preserve your anonymity. Furthermore, your responses will be grouped with those of other administrators, and only averages and other statistical values will be reported.

Would you please take ten minutes out of your busy schedule to complete this questionnaire, and enclose it along with your most recent roster in the self-addressed prepaid envelope? Thank you very much for your invaluable help.

Sincerely yours,

_ _ _ _ _ _ _ _ _ _ (Coded Identifier)

BIOGRAPHICAL DATA SHEET

This study was designed such that your identity will remain unknown to everyone except this investigator, as indicated by the coded identifier in the upper left corner. In this section please circle the letter or write in the choice that indicates your response. All comments are welcome; use back of sheets if necessary.

19___ 1. Birth year

_____ 2. Marital Status

- a. Married
- b. Separated
- c. Divorced
- d. Widowed
- e. Single

_____ 3. Number of Children

_____ 4. Present type of (work) appointment

- a. Permanent
- b. Probationary

_____ 5. Number of years at present institution

_____ 6. Other promotions received at present institution

- a. Full-time teaching to full-time administration
- b. Full-time teaching to teaching/administration
- c. Teaching/administration to full-time administration

$____ 7. Present annual salary (prior to any deductions)

_____ 8. Highest degree earned

- a. High School Diploma
- b. Associate Degree
- c. Bachelor Degree
- d. Masters Degree
- e. Doctorate Degree

_____ 9. Type of certification held

a. Teaching:

Temporary _____
Permanent _____

b. Supervision:

Temporary _____
Permanent _____

c. Administration:

Temporary _____
Permanent _____

19____10. Year that you earned your highest degree

______11. Are you presently working toward another degree?

- a. Yes
- b. No

12. Write the number of hours per week that you work in:

_____ a. Administrative Work
_____ b. Laboratory Shop
_____ c. Lectures
_____ d. Other

13. Number of years working in each category (Fill in those that apply.)

_____ a. School Administration
_____ b. Teaching
_____ c. Vocational Education
_____ d. Industry
_____ e. Other - Specify ____________________
____

PART II

In this section please circle the best answer to each statement in your personal opinion. There are five possible responses for each statement.

SA (Strongly Agree)
A (Agree)
U (Undecided)
D (Disagree)
SD (Strongly Disagree)

Please circle only one of the five responses with pen or pencil.

1. It is fine for a woman to work if her children are adequately cared for. SA A U D SD
2. The possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair. SA A U D SD
3. Women can live in productive harmony with men filling complementary and supplementary roles. SA A U D SD
4. Professional women can realistically expect to have a lifelong career. SA A U D SD
5. A mother's working can be easily accepted by a child. SA A U D SD
6. The higher the educational attainment of women the greater the chances of their advancement. SA A U D SD
7. Marriage is an asset for professional women SA A U D SD
8. Women have as much need to achieve as men. SA A U D SD
9. For professional women, children are an asset. SA A U D SD
10. In this institution women are not as likely to achieve positions of leadership as men. SA A U D SD
11. It is possible to be successful at both marriage and a career. SA A U D SD
12. A woman's professional career should be subservient to her husband's. SA A U D SD
13. Professional women tend to think of employment as a lifetime career. SA A U D SD

14. Most women would like to be promoted to an administrative position. SA A U D SD

15. A woman's first responsibility is to be a feminine companion of men and a mother. SA A U D SD

16. Women successfully compete with men at this institution. SA A U D SD

17. Women who want full equality should be prepared to accept equal responsibility. SA A U D SD

18. Most women would rather be promoted by merit rather than by seniority. SA A U D SD

19. Intellectual achievement of women is viewed as competitively aggressive behavior. SA A U D SD

20. In general professional women are on par with professional men at this institution. SA A U D SD

21. Women in supervisory positions have difficulty dealing with males in subordinate positions. SA A U D SD

22. A coeducational faculty provides a healthy atmosphere. SA A U D SD

23. Career women play down feminine appearance in order to be taken seriously. SA A U D SD

24. Most women, in your school, would like to end their educational careers as high school teachers. SA A U D SD

25. Women have unique qualities to bring to the classroom that are not present in male faculty. SA A U D SD

APPENDIX C

Follow-Up Letter I to Non-Respondent Vocational Education Directors
Follow-Up Letter II to Respondents
Follow-Up Letter III to Respondents

January 24, 1974

Dear Colleague:

On January 7, we sent you a letter and a questionnaire dealing with a study designed to determine:

1. the status of professional women in vocational education in comprehensive high schools, and
2. the similarities and differences in perceptions of female vocational faculty members as seen by themselves and school administrators.

We randomly selected a rather small group, which necessitates a good return in order to complete an accurate assessment of the goals mentioned above.

Since we have not heard from you, we are again asking you to assist us in completing this effort. Would you take ten minutes out of your busy schedule to complete this 25-item questionnaire? Also, would you please send us a roster of your vocational teacher and administrative staff identified by sex and courses assigned to them?

If your school has phased out vocational programs or if you have no female vocational faculty, we will appreciate your letting us know. Thank you for your invaluable assistance.

Sincerely yours,

Dear Colleague:

On January 7 we sent you a questionnaire dealing with the role of female vocational program faculty in comprehensive high schools. We have received your completed questionnaire and we want to thank you for taking the time to assist us.

We did find, however, that you forgot to send us the roster of your vocational teachers. Since we need it to randomly select several of your female vocational program faculty, we are asking you to send us the roster at your earliest convenience. In the event a roster is not available, a list of your faculty, identified by sex and their teaching assignment would suffice.

If your school has phased-out vocational programs or if you have no female vocational faculty, we will appreciate your letting us know.

Thank you again for your invaluable assistance.

Sincerely,

Dear Colleague:

On January 7 we sent you a questionnaire dealing with the role of female vocational program faculty in comprehensive high schools. We have received your completed questionnaire and roster and we want to thank you for taking the time to assist us.

We did find, however, that you forgot to identify the courses assigned to your vocational teachers on the roster you sent. Would you assist us by taking a few minutes out of your busy schedule and send us another roster identifying the courses assigned to your vocational teachers.

Thank you again for your invaluable assistance.

Sincerely,

APPENDIX D

Cover Letter to Female Vocational Faculty
Two-Part Instrument

March, 1974

Dear Colleague:

As a member of the academic community, I am sure you are aware of the need for additional meaningful research concerning professional women in comprehensive high schools.

The Department of Vocational Education at The Pennsylvania State University is conducting a nationwide study designed to:

1. determine the status of professional employment of women in vocational education at comprehensive high schools;
2. determine the similarities and differences of perceptions of female vocational faculty members as seen by themselves and college administrators.

You have been randomly selected to be one of the female faculty respondents for this investigation. You have been carefully coded so as to preserve your anonymity. Furthermore, your responses will be grouped with those of other faculty members and only averages and other statistical values will be reported.

Would you take ten minutes out of your busy schedule to complete this questionnaire?

Thank you for your most invaluable assistance. Best wishes.

Sincerely,

_ _ _ _ _ _ _ _ _ _ _ _ (Coded Identifier)

BIOGRAPHICAL DATA SHEET

This study was designed such that your identity will remain unknown to everyone except this investigator, as indicated by the coded identifier in the upper left corner. In this section please circle the letter or write in the choice that indicates your response. All comments are welcome; use back of sheets if necessary.

19___ 1. Birth year

_____ 2. Marital Status

- a. Married
- b. Separated
- c. Divorced
- d. Widowed
- e. Single

_____ 3. Number of Children

_____ 4. Present type of (work) appointment

- a. Permanent
- b. Probationary

_____ 5. Number of years at present institution

_____ 6. Other promotions received at present institution

- a. Full-time teaching to full-time administration
- b. Full-time teaching to teaching/administration
- c. Teaching/administration to full-time administration

$____ 7. Present annual salary (prior to any deductions)

_____ 8. Highest degree earned

- a. High School Diploma
- b. Associate Degree
- c. Bachelor Degree
- d. Masters Degree
- e. Doctorate Degree

9. Type of certification held

- a. Teaching:
  - Temporary ______
  - Permanent ______
- b. Supervision:
  - Temporary ______
  - Permanent ______
- c. Administration:
  - Temporary ______
  - Permanent ______

19___10. Year that you earned your highest degree

_____11. Are you presently working toward another degree?

- a. Yes
- b. No

12. Write the number of hours per week that you work in:

_____a. Administrative Work
_____b. Laboratory Shop
_____c. Lectures
_____d. Other

13. Number of years working in each category (Fill in those that apply.)

_____a. School Administration
_____b. Teaching
_____c. Vocational Education
_____d. Industry
_____e. Other - Specify

____
____

PART II

In this section please circle the best answer to each statement in your personal opinion. There are five possible responses for each statement.

SA (Strongly Agree)
A (Agree)
U (Undecided)
D (Disagree)
SD (Strongly Disagree)

Please circle only one of the five responses with pen or pencil.

1. It is fine for a woman to work if her children are adequately cared for. SA A U D SD
2. The possibilities for a woman to be promoted to the next academic rank, when eligible, are only fair. SA A U D SD
3. Women can live in productive harmony with men filling complementary and supplementary roles. SA A U D SD
4. Professional women can realistically expect to have a lifelong career. SA A U D SD
5. A mother's working can be easily accepted by a child. SA A U D SD
6. The higher the educational attainment of women the greater the chances of their advancement. SA A U D SD
7. Marriage is an asset for professional women. SA A U D SD
8. Women have as much need to achieve as men. SA A U D SD
9. For professional women, children are an asset. SA A U D SD
10. In this institution women are not as likely to achieve positions of leadership as men. SA A U D SD
11. It is possible to be successful at both marriage and a career. SA A U D SD
12. A woman's professional career should be subservient to her husband's. SA A U D SD
13. Professional women tend to think of employment as a lifetime career. SA A U D SD

14. Most women would like to be promoted to an administrative position. SA A U D SD

15. A woman's first responsibility is to be a feminine companion of men and a mother. SA A U D SD

16. Women successfully compete with men at this institution. SA A U D SD

17. Women who want full equality should be prepared to accept equal responsibility. SA A U D SD

18. Most women would rather be promoted by merit rather than by seniority. SA A U D SD

19. Intellectual achievement of women is viewed as competitively aggressive behavior. SA A U D SD

20. In general professional women are on par with professional men at this institution. SA A U D SD

21. Women in supervisory positions have difficulty dealing with males in subordinate positions. SA A U D SD

22. A coeducational faculty provides a healthy atmosphere. SA A U D SD

23. Career women play down feminine appearance in order to be taken seriously. SA A U D SD

24. Most women in your school, would like to end their educational careers as high school teachers. SA A U D SD

25. Women have unique qualities to bring to the classroom that are not present in male faculty. SA A U D SD

APPENDIX E

Follow-Up Letter IV to Non-Respondent Female Vocational Faculty

Dear Colleague:

In March, we sent you a letter and a questionnaire dealing with a study designed to determine:

1. the status of professional women in vocational education in the comprehensive high schools, and
2. the similarities and differences in perceptions of female vocational faculty members as seen by themselves and school administrators.

We randomly selected a rather small group, which necessitates a good return in order to complete an accurate assessment of the goals mentioned above.

Since we have not heard from you, we are again asking you to assist us in completing this effort. Would you take ten minutes out of your busy schedule to complete this 25-item questionnaire?

Thank you for your most invaluable assistance. Best wishes.

Sincerely,

APPENDIX F

Table 1. Biographical Data of Selected Female Vocational Faculty and Administrators in Comprehensive High Schools

Table 1. Biographical Data of Selected Female Vocational Faculty and Administrators in Comprehensive High Schools

Variable	N	Mean	Stand. Dev.	Range	N	Mean	Stand. Dev.	Range
	Female Faculty Characteristics				Administrators Characteristics			
1. Age	474	37.9	11.7	22-65	300	42.8	10.3	22-70
2. Number of Children	274	2.2	1.2	0-9	267	2.5	1.2	0-8
3. Number of Years at Present Institution	492	7.4	6.6	1-35	310	9.2	7.8	1-39
4. Annual Salary	478	10024.2	2540.6	3863-20000	300	14171.2	4177.5	6480-26500
5. Number of Hours per Week Working in:								
a. Administration	90	9.7	9.0	0-60	219	37.3	18.2	2-84
b. Laboratory Shop	225	16.1	8.1	0-40	65	16.5	8.0	3.35
c. Lectures	242	13.0	8.7	0-40	81	11.9	8.0	2-35
d. Others	238	19.4	14.0	0-60	87	19.3	14.9	2-75
6. Number of Years Worked in Each Category:								
a. School Administration	27	3.6	2.7	0-11	192	8.4	6.2	1-30
b. Teaching	450	9.8	8.2	1-41	271	9.9	7.2	0-42
c. Vocational Education	191	7.3	7.4	1-45	103	8.5	8.2	1-40
d. Industry	70	5.2	4.7	0-25	87	5.4	5.4	0-30
e. Others	105	6.6	6.4	0-40	69	6.5	6.0	0-29